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THE THEORY OF EXPECTATION APPLIED TO MUSICAL LISTENING.
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THE PROJECT PURPOSES WERE TO IDENTIFY THE ELEMENTS IN MUSIC USED BY EXPERT LISTENERS IN DETERMINING THE ARTISTIC VALUE OF MUSIC, TO DISCOVER WHAT MUSICAL SKILLS AND KNOWLEDGES ARE NECESSARY FOR THE LISTENER TO RECOGNIZE THESE ELEMENTS, AND TO USE THESE FINDINGS IN A COMPARISON WITH A SPECIFIC AESTHETIC THEORY. ATTEMPTS WERE MADE TO DETERMINE WHETHER THESE VALUE ELEMENTS ARE TEACHABLE, IF SO, THE AGE LEVELS AT WHICH THEY ARE TEACHABLE, THE CREATION OF MEASUREMENTS TO EVALUATE RECOGNITION OF THESE ELEMENTS, AND THE SKILLS AND KNOWLEDGES USED. THE TWO PROBLEMS STUDIED WERE (1) THE SKILLS AND KNOWLEDGES A STUDENT WOULD NEED TO PARTICIPATE IN THE MUSICAL EXPERIENCE AS DESCRIBED BY MEYER S THEORY OF EXPECTATION AND (2) WHETHER THESE PROBLEMS COULD BE TAUGHT WITHIN A 2-YEAR PERIOD TO FIFTH-GRADE CHILDREN. THE TOTAL LIST OF SKILLS AND KNOWLEDGES (APPROPRIATE FOR MUSICAL LISTENING AND GATHERED FROM THE MUSICAL EXPERTS) WAS OBVIOUSLY MUCH TOO EXTENSIVE AND DIFFICULT TO UTILIZE IN A ONE-YEAR GRADE SCHOOL COURSE. TWENTY-SEVEN FIFTH-GRADE CLASSES WERE USED IN INTERPRETING THE RESULTS OF THE STUDY AND DRAWING CONCLUSIONS FROM THEM. APPROXIMATELY 10 PERCENT OF THE TESTS GIVEN THESE CLASSES WERE HIGHLY COMMENDABLE, WITH CADENCES, PHASES, MELODIES, CONTRASTING PARTS, TIMBRE, AND CLIMAXES ALL CORRECTLY IDENTIFIED AND MARKED. TWO VIEWPOINTS RESULTED FROM THE STUDY--(1) DESIRABILITY OF AN EARLY START IN INTENSIVE MUSICAL LEARNING AND (2) THE IMPRACTICABILITY OF TEACHING ADEQUATE MUSICAL SKILLS AND KNOWLEDGES WITHIN THE EXISTING ELEMENTARY MUSIC FRAMEWORK BECAUSE OF LIMITED TIME ALLOWED. (GC)

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The Theory of Expectation Applied to Musical Listening

Cooperative Research Project Number H-106

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1966

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TABLE OF CONTENTS

Page

ACKNOWLEDGEMENTS iii

Chapter

I The Problem 1
II Determination of Elements 32
III Selection of Experiences 109
IV Interpretation 204

APPENDICES

1 Mean scores and t values I-1
2 Mean scores and t values - extended keyboard group II-1
3 Mean scores and t values - one semester group III-1
4 Evaluation Measures IV-1

THE THEORY OF EXPECTATION
APPLIED TO MUSICAL LISTENING

The purpose of this project was to identify the elements in music used by expert listeners in determining the artistic value of music, to discover what musical skills and knowledges are necessary for the listener to recognize these elements, and to use these findings in a comparison with a specific aesthetic theory, namely the theory of expectation promulgated by Leonard B. Meyer. The purpose included attempts to determine whether these value elements are teachable, the age levels at which they are teachable, and the creation of measuring devices to evaluate recognition of these elements and the skills and knowledges used.

Music in the public schools has in the past half-century grown from a novelty to a staple. In most school systems, music is not only offered but required in the first six or eight grades. The unspoken philosophy behind this requirement is not that all will become performers of music but that all can become consumers of music. The consumer may rarely or never play an instrument or sing, but he participates in the pleasures of music as part of the concert audience, as a record buyer, as a TV viewer and radio listener. The principal objective of public school music is, as it should be, to teach the potential consumer how to listen to music with understanding and discrimination. If "music for all" is a legitimate goal, then all public school-age children should be undergoing experiences designed to increase their understanding and appreciation of music. Hartshorn (1) states, "If we take (music appreciation) to be that phase of the music program which emphasizes the aesthetic appeal of music and seeks primarily the attitudes with which we wish our students might respond to its emotional power, then we accept the appreciation of music as our ultimate goal in music education." "To transform the public musical culture into a recognized part of each person's environment" should be the central focus of the music program.

At the present time an increased interest in listening may be seen in public school music emphases, partially due, perhaps, to the failure of the music reading program. Lists of objectives found in recent writings and textbooks stress listening, and a spate of recordings for schoolroom use has appeared in the past ten years. Yet there seems to be no approach to aural understanding; the pupil is expected simply to listen, without any system or method through which the teacher can make the listening meaningful. Most of the recordings offered are song materials rather than art music, and few texts contain suggestions for understanding the musical selections referred to or described. (See annotated list.) Because the mere sensation of tone is pleasing and excites a pleasurable reaction in the listener, children in the first four grades respond well to the experience of listening. Beyond this age level, however, they become aware of many musical sounds which please them but which are not condoned in the classroom, and so their attitude or liking for the listening experience begins to decrease (2). Lacking training in listening, pupils become attracted to the easily understood sounds of popular and commercial music and refuse to wrestle with the problems presented by art music. It is reasonable to expect that the child who is equipped with skills and knowledges for coping with art music will find it more attractive than the superficial products of the juke box trade.

The familiar fact is that the public school music program fails noticeably in its goal of listening. The layman who is aware of the music program thinks of it in terms of performing groups such as bands and choruses. The researcher interested in test development focuses on musical aptitude, music reading or factual knowledge. The textbook writer and publisher offer the music teacher books filled with songs to sing and rhythms to be played or danced. This neglect of listening seems to be due to a variety of factors, chief of which is the paucity of knowledge about the listening process and about the role of specific skills and knowledges in it, with the correlative lack of teaching method, realizable goals, and evaluative tools. Lacking these, the music teacher has emphasized performance or participation in the assumption that they would result in musical understanding and discrimination. But research indicates that musical experiences per se do not necessarily produce preferences for better music (3).

The listening process seems to be a complex one, utilizing mental and aural skills, intellectual knowledges, physical reaction and emotional response. Since the advent of the phonograph with its immense possibilities for enrichment in the area of listening, music appreciation has been approached in several ways, each of which endeavored to make use of some part of the total listening process. The earliest approach was to teach the main melodic theme of the work, often by attaching words to it, and expecting children to memorize the composition and composer appropriate for each melody; later came the factual approach which emphasized the composer and his dates, the meaning of musical terms and the instruments performing the work; finally the programmatic approach had its day, in which all music was heard as having a story or picture or mood for which the pupil listened. None of these approaches singularly is legitimate because each is fragmentary, based upon only one phase or factor of the listening process. The abstract quality of art music demands that the pupil be given a basis upon which to understand the music as it proceeds--to hear and know what is happening at the present moment in the work--and to be able to comprehend the work as a whole when he has heard it to its completion. In order to teach the pupil how to listen with understanding, the teacher must know what things in the music are essential for his comprehension so these can be pointed out, explained, heard, and put into their proper context; the teacher must also know what skills and knowledges are necessary for the pupil to grasp the essentials of the music--physical reaction and emotional response, though part of the process need not be dealt with in the classroom, as the first is an automatic reaction, and the second will be dependent upon subjective factors and also upon the skills and knowledges which the pupil can learn to utilize.

In the last fifty years, musicology and musical criticism have contributed their findings to the general body of musical knowledge, so that at present there are many fine textbooks for music appreciation, all consistently in agreement as to which composers and which compositions are of major importance, and what the qualities of greatness are that distinguish the works of the well-known composers. These textbooks are largely confined to the college level, and though they agree upon those things which the listener should hear in the music, their statements are of too general a nature to help the unskilled listener find meaning in the music as it unfolds. To know, for example, that the melodies of Haydn contain many Austrian fulk-tune characteristics, or that he was the first to write string quartets with four genuinely independent parts, does not help the listener follow a Haydn string quartet intelligently. The work of Leonard B. Meyer in presenting the theory of "expectation" offers a basis upon which musical listening may be approached coherently, a basis which has been accepted as valid by aestheticians and music educators. The theory of expectation, in its simplest form, states that musical motives, phrases and longer musical entities are "sound terms" which to the knowledgeable listener imply certain other musical entities, as an antecedent implies a consequent. Meaning and emotion are created in the listener when the expected consequent does not appear exactly as expected. Tension is produced in the listener by the disappointment of his expectations, and the tension is resolved when the musical resolution does arrive. The resolution may be delayed, may be altered or transformed in one of several ways, but must always appear to be a satisfactory consequent to the "sound term" or "musical gesture" which set up the listener's expectations. This pattern of expectation-tension-resolution-fulfillment happens innumerable times within a single piece of music, and controls the formal elements of the music from the smallest motif to the large over-all structure of the work. Therefore, the listener's understanding of the work is based upon his expectations of what will happen as the work unfolds, and his pleasure at the unexpected but logical (within the style) and satisfactory twists which the composer has utilized to create his work of art. "Affect or emotion-felt is aroused when an expectation--a tendency to respond--activated by the musical stimulus situation, is temporarily inhibited or permanently blocked" (4). "...the same stimulus, the music, activates tendencies, inhibits them, and provides meaningful and relevant resolutions" (5).

At present, Meyer's theory is being used for teaching music appreciation only at the University of Chicago. Widespread utilization of this approach will probably not occur until the theory has been translated into a teaching method or system, and research has illustrated its potential for the classroom.

The problem of this study is to identify the elements in music upon which the skilled listener bases his understanding of the music and his value jugement of it. It is a fact of art that some works are more valuable than others, that the listener hears sounds which represent a higher worth than the sounds in certain other compositions. These elements of greatness seem to be relatively stable and objective; they remain the same for the listener upon repeated hearings and lead to similar value judgments by a variety of listeners; statements by experts concerning the qualities and characteristics of compositions and composers display a high level of agreement. When the listener is unskilled, or when the style of the music is unfamiliar to him, (which simply means he is unskilled in that style) he is less able to identify the elements in the music upon which to form a proper value judgment. Therefore, music in a new style is often evaluated very differently by a group of skilled listeners, and will change its value for each of them upon repeated hearings. Similarly a group of unskilled listeners will disagree upon the value of works of high artistic merit because they lack the skills and knowledges necessary for understanding and discrimination.

Although aestheticians have probed into the meaning of art and the significance of the aesthetic experience, there has been no attempt to objectively identify those elements which contribute to the aesthetic experience. Musicians are able to agree upon statements describing what is heard in a particular composition, but there has been no attempt to discover, within a controlled situation, whether the musician's focus as he listens is upon those things which his spoken statement posits as important. Philosophical thought has centered upon the art object itself and upon how it communicates its meanings to the percipient. Its conclusions, though stimulating and illuminating to the individual percipient, have not contributed to teaching and learning because they lack objectivity and concreteness. The present study attempted to objectify the crucial elements in art music by identifying the items stated as important in music by skilled listeners, by examining the reactions of skilled listeners in the act of listening, by identifying the elements which were common to all of them, by identifying the elements which were common to experiences with a variety of styles of music, and by comparing these with the reactions of unskilled listeners and the elements which the unskilled considered important in the music.

This has little practical value for teaching unless the skills and knowledges can be discovered which are used in recognizing the crucial elements of art music. Aural skills are thought to include tonal memory, melodic, harmonic and rhythmic sensitivity and recognition of instrumental timbre. Probably auditory-visual skills also contribute to musical listening. Essential knowledges are thought to include recognition of style, both of a particular period and a particular composer, knowledge of the general philosophy of art of the period (such as the doctrine of "Affects" of the baroque), perhaps the historical position of any particular style or composer, perhaps the social and technological conditions determining quality of instruments and type of artistic patronage. Whether performance skills are necessary for musical listening is not known. The assumption in public school music has been that playing an instrument or singing was the best way to develop an understanding of music, presumably this understanding to include listening. Results of the emphasis upon performance have strongly indicated that musical understanding is not fostered on the sole basis of performance, but this is not to negate the possibility that some familiarity with the problems and techniques of performance might greatly enhance the listener's understanding of what he hears.

The project did not include an investigation into possible emotional factors present in musical listening. That music produces emotional responses is well established, (6) but in the opinion of Meyers and others (7) this is an undifferentiated response which will conform to the listener's intellectual responses. Even if this is not so, the practicality of shaping emotional responses in classroom teaching is limited to the use of good psychological principles of learning and of group dynamics. The study did not propose to discover factors necessary for liking music, but for understanding it; the emphasis was upon discrimination rather than preference. For applicability to classroom practices, the study was most appropriate to the point of view of McMurray, (8) who proposes that teachers should not attempt nor expect to teach pupils a stronger liking for music but should show pupils what is to be found in music.

Public school music has in the past been characterized by a lack of emphasis upon achievement, upon systematic progress toward set goals, and upon evaluation. Whether music as a whole is considered or a single facet such as music appreciation, the lack is apparent. Colwell (9) found in a study of elementary and high school students that pupils do not progress in achievement from one year to the next, but often remain at the same level of musical learning for several years or even regress in learning and achievement. The paucity of learning in relation to the amount of time spent in music suggests that music should utilize more of the elements of the disciplines, such as method, systematic evaluation, research into teaching materials and learning experiences, and graduated goals for each grade level. The present project was aimed at discovering an objective basis upon which a method for teaching one phase of music may be organized, that phase being appreciation. It was hoped that the study could result in these advantages: First, the study could produce a clearly defined description of what the expert listens for in music, enhancing the introspective statements of aestheticians and the valuations of the listening textbooks. Second, the description of what experts listen for and actually hear in the music could be utilized to validate the theory of expectation of Meyer's. The study could indicate whether the theory of expectation is a fruitful basis upon which to organize grade school teaching units in listening, and could determine whether another approach based solely upon the findings of the study is more advantageous for learning. Third, the study could provide information indicating whether contemporary music offers different listening problems from earlier music, thus requiring different teaching and learning experiences. Fourth, the study could determine the specific skills and knowledges needed to listen with understanding, and the relative role of each. Fifth, the study could reveal how much achievement can take place in one year in discrimination of classical music. Sixth, the study could provide evaluative instruments in an area of music for which there are at present few satisfactory evaluative tools, if any.

Objectives: The specific objectives of the study were:

1. To identify the elements in music which the expert states to be those decisive to his value judgment of the music, and those upon which music appreciation texts agree.
2. To identify those elements in music upon which the expert in listening actually does make his value judgments. To discover any variance between the stated elements and the actual elements.
3. To determine if these musical value elements conform to Meyer's theory of expectation.
4. To discover whether these elements are the same for both experts and nonexperts, including listeners with specific musical interests and those without.

5. To discover whether those elements are the same for all styles and periods of music, and for music of varying degrees of artistic merit.
6. To identify the skills and knowledges used by experts in recognizing the value elements in music.
7. To determine whether these are the same skills and knowledges as those implied by the theory of expectation.
8. To discover whether these skills and knowledges are consistent for listeners making similar value judgments; to determine whether such skills and knowledges are necessary in recognizing musical elements.
9. To determine the amount of these skills and knowledges necessary to make valid value judgments.
10. To organize a basic methodology for teaching recognition of these musical elements, based on Meyer's theory of expectation.
11. To organize and teach a year's music listening course to fifth grade school children, the unit limited to one style of music, namely classical. The unit will have as its objectives understanding of the classical style and ability to discriminate between superior and inferior music in this style.
12. To select or create evaluative tools with which to measure musical listening in relation to musical skills and musical knowledges.
13. To determine by means of the evaluative tools the feasibility of the four different methods and emphases. To determine whether it is possible to teach musical understanding and discrimination to grade school children based upon the findings of the preceding parts of the study.

Related Research: Research in musical listening is limited in quantity and in its direct relationship to the proposed study. The majority of experiments which have been conducted pertain to teaching methods rather than to the listening experience itself or the skills required for it. However, in this latter category there have been some few studies which show the need for training and indicate that appreciation is a learned response. Using the

Oregon Musical Discrimination Tests, Bugg (10) found that trained subjects were both more accurate and more consistent in their musical judgment than those without training. Subjected to a brief period of training, both groups improved in their ability to make correct discriminations. Gernet, (11) using a test of his own making, explored musical discrimination from grade school through college, and concluded that training is one of the principle determinants of the level of appreciation, that appreciation is a learned response. He also found that increases in intelligence and musical aptitude produced statistically significant differences in appreciation. The study by Rubin-Rabson (12) produced similar results relative to training, but showed a very low correlation between the intelligence and musical discrimination. Two studies dealt with the relationship between musical taste and capacity or talent. Fay and Middleton (13) found that those with more talent as measured by the Seashore Measures of Musical Talent had significantly better taste. Since the more talented are frequently also the more highly trained, the fact that this study did not account for training makes its conclusions subject to question. However, the same conclusion was reached by Kyme, (14) who obtained correlations from .56 to .83 between scores on a Test of Esthetic Judgment and teacher ratings of musical capacity.

Two studies indicate a skill and a knowledge important for listening. Bugg and Herpel (15) determined that tonal memory has a positive correlation with music appreciation. The Eberle study (16) found that technical analysis contributed significantly to achievement in music appreciation, but may be questioned since it measured achievement by a purely factual test.

A series of studies by Hevner (17, 18, 19) into elements of expression in music are informative but of little value to the present study, since they define expressiveness as "mood," and explore the relationship between tempo, mode, rhythm, pitch and melody and the mood of the music as perceived by the listener. The present study will avoid references to the programmatic or mood aspects of music unless these enter unmistakably into the value judgments of experts.

Recent studies by Colwell (20, 21) with groups of seventh grade pupils indicate that musical preferences after six years of music are strongly for popular and commercial music, and that training had little effect on preferences. Colwell (23) found in a study on the ability of grade school pupils to discriminate between musical performances and unmusical performances, that chronological age was not a major factor in ability to discriminate. Not until late high school or college was maturation and/or training evident; however, it was evident that certain types of music such as classic and baroque were much easier to correctly discriminate than other styles presumably due to the cultural milieu in which the students were raised.

There is no shortage of materials on music appreciation or music listening. Books and doctoral dissertations have been written on almost every conceivable phase, including listening for the elementary school student, high school student, college music major, in humanities courses and for the lay public. However, few of these materials address the real problem of contributing through education to the understanding and perception of music as an art form. Elementary texts devote their space to stories about the composers and the music, books for older persons repeat this error or become completely intellectual with a simplified music history approach. Some texts attempt to do both, others appear to have good intentions but end up so badly organized that no systematic ordering is perceptible. Even in the best books, it is only through implication that one can begin to obtain any insight into what should be taught to obtain the goals that all espouse.

In order to save future researchers a great deal of time, an annotated listing of over 200 music appreciation books is provided. These books were scrutinized for statements regarding the elements of music necessary in learning. List A consists of the texts found to have real merit in the information they offer as to the skills and knowledges a student should have to listen intelligently and obtain the reactions Meyers' theory implies. List B includes those books found to be of negligible value in this area.

List A

Abraham, Gerald
This Modern Music
Hoddeston, England, The Clock House Press, 1933

Deals primarily with contemporary idiom stylistically; good chapters on discord, chords and harmony, modern melody and form.

Copland, Aaron
What to Listen for in Music
New York, McGraw-Hill Book Co., 1937

Listening from composer's standpoint. Uses works from all periods. Elements of music--rhythm, melody, harmony, tone color, musical texture and structure. Forms of music--sectional, variation, fugal, sonata, free opera, contemporary music, film music, record list and bibliography. Listening on "musical" rather than on "sensuous" or "expressive" plan. Written for the man in the street. Style similar to Bernstein TV talks--for the adult reader.

Dunham, Richard
Music Appreciation in the Public Schools of the United States 1897-1930
Doctoral dissertation, University of Michigan, 1961

A general description of objectives and methodology of music appreciation courses up to 1930. Although the newest ideas are over 35 years old, a good background for the scholar interested in instruction in listening.

Erickson, Robert
The Structure of Music, A Listener's Guide
New York, Noonday Press, 1955

Study based on melody with a detailed discussion of melodic elements. Uses two major techniques, counterpoint and orchestration, for discussion.

Fish, Arnod and Gordon Hardy
Music Literature: A Workbook for Analysis
New York, Dodd-Mead, 1963

Collection of examples with suggestions for analysis which might be useful in preparing a list of fundamentals.

Miller, Hugh M.
Introduction to Music
New York, Barnes and Nobles, Inc., 1958

Includes fundamentals briefly stated, with large listening lists. Unimaginative.

Ratner, Leonard
Music, The Listener's Art
New York, McGraw-Hill Book Co., Inc., 1957

Highly recommended. Detailed discussion of musical elements and their relationships, with musical illustrations and charts and summaries. Historical section is concerned with musical style.

Sessions, Roger
The Musical Experience of Composer, Performer, Listener
Princeton, Princeton University Press, 1950

Well worth reading but not useful in the classroom situation. Reader must have musical background to be discriminating.

Smith, Wesley E.
A Plan for Organizing the Laboratory Listening Experiences of a Symphonic Literature Course at St. Lawrence University
Doctoral Dissertation, Teachers College, Columbia, 1952

Developed a guide and resource chart for independent listening to 18 symphonies. Organization on timbre, themes and rhythm.

List A (cont.)

Ulrich, Homer
Music: A Design for Listening
New York, Harcourt Brace and Co., 1957

Part One: Elements and Forms, Part Two: History and Literature. Recognition of basic principles of motion-rest; tension-release. Good format. For college students or for teachers. Well written.

Zuckerkandl, Victor
Sinse of Music
Princeton, Princeton University Press, 1959

Influenced by Schenker on elements of music. Technical but worth looking at.

List B

Abbott, Lawrence
The Listener's Book on Harmony
Philadelphia, Theodore Presser Co., 1941
Operates on principle of greater enjoyment by nonpracticing knowledge of harmony. Deals in generalities and unmeaningful descriptive terminology (e.g., p. 43, the diminished triad creates an ominous effect.)

Adler, Lawrence
New Values in Music Appreciation
New York, Roerich Museum Press, 1935
Emphasizes listening in terms of own experiences and past. No fundamentals

Bagar, Robert and Louis Biancolli
The Concert Companion
New York, Wittlesey House, 1947
Description of composers and works.

Bailey, Eunice
Discovering Music with Young Children
1958
Discusses rhythmic activities of young children, perhaps usable up to 2nd grade.

Baker, Ellen F.
The Wonderful Story of Music
New York, Thomas Y. Crowell Co., 1936
Musical novel. Story between a woman, a proficient musician and her niece and nephew.

Baldwin, Lillian Luverne
Listeners Anthology of Music
Volumes I and II
Morristown, New Jersey, Silver Burdett Co., 1948
Deals with composer's lives and standard works. No fundamentals; historically says "In the beginning was Bach."

Barbour, Harriot Buxton
How to Teach Children to Know Music
New York, Smith and Darrell, 1944
Development of music appreciation from early childhood. Deemphasis on music, emphasis on stories. Poor choice of literature.

Barbour, Harriet B. and Warren S. Freeman
A Story of Music
Boston, C.C. Birchard and Co., 1937
Palestrina to Strauss. Relationship of music to history, geography and social progress. An art growing with civilization.

Barlow, Wayne
Foundations of Music
New York, Appleton Century-Crofts, 1953
Introduces many technical terms and small details but never really hits important essentials.

Barzun, Jacques
Music in American Life
Garden City, New York, Doubleday and Co., Inc., 1956
More about American life (i.e. society) than music. No fundamentals.

Berg, David Eric
The Art of Listening
New York, The Caxton Institute, 1927
Lists the normal elements, rhythm, meter pattern, harmony and so on. Becomes nonmusical as it procedes.

Bernstein, Leonard
The Joy of Music
New York, Simon and Schuster, 1959
A Collection of seven Bernstein TV scripts preceded by several pseudo-sophisticated imaginary dialogues; illustrated with pictures from Bernstein's TV productions, with many musical examples. Interesting but not useful except as side reading.

List B (cont.)

Bernstein, Martin
Introduction to Music, 2nd Edition
Englewood Cliffs, New Jersey, Prentice-Hall, Inc., 1951
Textbook. Some attempt to describe fundamentals but primarily a survey of music after J. S. Bach.

Bissell, Arthur Dart
The Role of Expectation in Music
Doctoral Dissertation, Yale University, New Haven, 1921
No elements of music.

Bockman, Guy A. and William J. Starr
Scored for Listening: A Guide to Music
New York, Harcourt, Brace and Co., 1959
Primarily an anthology of definitions of musical terms. How to follow a line score, rhythm and structure, presentation and development of musical ideas, forms and types, line scores and brief analyses.

Boekelheide, Viola Ethel
Some Techniques of Assessing Certain Basic Music Listening Skills of Eight and Nine Year Olds
Ann Arbor, Michigan University Microfilms, 1960
Attempt to find answer to problem of guided listening by focus on recipients of music rather than on teacher. Centered more on child psychology than on the music.

Boyden, David D.
An Introduction to Music
New York, Alfred A. Knopf, Inc., 1957
Section on fundamentals but not particularly illuminating.

Brower, Harrietta
Story-Lives of Master Musicians
New York, Frederick A. Stokes Co., 1923
Incidents in lives of such composers as Palestrina, Handel, Haydn, Schubert, Chopin, Beethoven, and Wagner.

Brown, Abbie Farwell
The Boyhood of Edward MacDowell
New York, FA Stokes Co., 1924
Another nonmusical elementary book of inaccuracies.

Bruxner, Mervyn
Letters to a Musical Boy
New York, Oxford Press, 2nd ed., 1954
No fundamentals. Superficial treatment of composers, performance, etc.

Buchanan, Fannie
How Man Made Music
Chicago, Follett Publishing Co., 1936
Child's history of music. Also includes biography of Dan Emmett and Stradivarius. A number of musical scores included.

Buchanan, Fannie R.
Magic Music
Des Moines, Wallace Publishing Co., 1931
Colorful illustrations, stories of great compositions.

Burch, Gladys and Helmut Ripperger
The Junior Musical Quiz
New York, G. Schirmer, Inc., 1940
Twenty-five quizzes on music.

Burch, Gladys and John Wolcutt
A Child's Book of Famous Composers
New York, A.S. Barnes Co., 1939
Twenty biographical sketches. Historical setting with style of music from child's point of view.

List B (cont.)

Cahn, M. M.
Music Listener's Guide
San Francisco, Forman Publishing Co., 1954

Based on ideas from his dissertation.

Carner, Kathleen and Jerome Pastene
The Child's Book of the Symphony
New York, Howell, Soskin and Co., 1941

Ten symphonies explained, analyzed and presented in story form. Beethoven Fifth, Haydn Surprise, Schubert Unfinished, Mendelssohn Italian. Writes out themes simply. List of best recordings.

Clarkson, Edith Margaret
Let's Listen to Music
Toronto, Canada, G. V. Thompson Limited, 1944

One-hundred lesson outlines on specific pieces.

Cline, Sarah Yancey
Let's Explore Music
Boston, New York, Ginn and Co., 1940

(to accompany a music series.) Series of lessons for grade school. Little to do with music.

Cohn, Arthur
The Collector's Twentieth Century Music in the Western Hemisphere
Philadelphia, Lippincott, 1961
Series (Keystone books in music)

Discussion of recorded music of 27 contemporary composers. Stylistic features subordinated to generalization about specific works.

Cooke, James F.
Musical Playets for Young Folks
Philadelphia, Theodore Presser Co., 1917

Scenes from lives of great composers to be acted out.

Cooke, James F.
Standard History of Music
Philadelphia, Theodore Presser Co., 1936

Music history organized into 43 lessons. Self-instruction.

Cooke, James Francis
Young Folk's Picture History of Music
Philadelphia, Theodore Presser Co., 1925

Can cut out and paste these pictures.

Cooper, Grosvenor
Learning to Listen: A Handbook for Music
Chicago, University of Chicago Press, 1957

Stresses listening to 18th and 19th century music under the headings of rudiments, movement, harmony, form, color and style.

Copland, Aaron
Copland on Music
New York, W.W. Norton, 1963

Selection of diverse essays. Interesting reading but no fundamentals.

Copland, Aaron
Music and Imagination
Cambridge, Massachusetts, Harvard University Press, 1952

Interesting reading but concerned with ideas of importance to Copland rather than as a text book.

Copland, Aaron
Our New Music
New York, McGraw-Hill Book Co., 1941

Ideas formulated from articles and lectures since 1927. Presents case for 20th century music beginning with the 19th century.

Cotton, Marian and Adelaide Bradburn
Music Throughout the World
Evanston, Summy Birchard, 1960

Deals with music by nationality; an involved approach for a whole book.

List B (cont.)

Cox, M., C. Althea, and Alice Chapin
Imaginary Biographical Letters from Great Masters of Music
Philadelphia, Theodore Presser, 1911
Letters to a young reader describing events in the composer's lives.

Crawford, Althea and Rebekah
Pictured Lives of Great Musicians
Boston, C.C. Birchard and Co., 1924
Bach, Beethoven, Haydn, Mozart, Schubert and Wagner. Many life incidents, lots of pictures and sprinkled with musical themes.

Curtis, Natalie
The Indian's Book
New York, Harper and Brothers Publishing Co., 1935
Indian music and Indian folklore (North American).

Dallin, Leon
Listener's Guide to Musical Understanding
Dubuque, Iowa, W.C. Brown, 1959
An ordinary college music appreciation text. Easy source of examples of various form, rhythms, etc.

Damrosch, Walter, G. H. Gartlan and K. W. Gehrkens
Teacher's Manual on Musical Appreciation
New York, Hinds, Haydn and Eldridge, 1923
Story approach, no fundamentals. Also see notes of Damrosch music appreciation broadcasts.

Darrell, R. D.
Good Listening
New York, Mentor Books, 1955
Primarily a listening guide. Sets up no detailed listening criteria.

Dorian, Frederick
History of Music in Performance
New York, W.W. Norton, 1943
On musical interpretation. Worth reading but no categorization of musical elements.

Downes, Edward
Adventures in Symphonic Music
New York, Rinehart and Co., 1944
Musical works grouped into programs; e.g., Humor in Music, Symbolism in Music.

Downes, Irene, editor
Olin Downes on Music
New York, Simon and Schuster, 1957
Collection of reviews 1907-1955. Interesting reading but not useful discussion of music itself. Terminology vague. Concentration on performance.

Earhart, Will
Music to the Listening Ear
New York, M. Witmark and Sons, 1932
Textbook (harmony). Deals with fundamentals but says nothing worthwhile.

Eberle, Alma M.
A Controlled Experiment to Determine the Value of Technical Analysis in Music Appreciation
Master's Thesis, M.Ed., Pennsylvania State University, 1938
No fundamentals.

Erb, J. Lawrence
Music Appreciation for the Student
New York, G. Schirmer Inc., 1936
Handbook for music students. Traces art song, folk song, oratorio, cantata and opera. Makes study of piano, organ, symphony orchestra, and the groups.

Ewen, David
Complete Book of 20th Century Music, 2nd edition
Englewood Cliffs, New Jersey, Prentice-Hall, 1959
Primarily composer oriented: critical analysis of style, biography, list of works, etc. Reference.

List B (cont.)

Ewen, David
Home Book of Musical Knowledge
New York, Prentice-Hall, 1954
Primarily concerned with facts--definitions of terms, forms, etc. and composer's lives. A one-volume collection for the amateur.

Ewen, David
Lighter Classics in Music
New York, Arco, 1961
Primarily biographies of composers in alphabetical order.

Ewen, David
Musical Masterworks, 2nd ed. rev.
New York, Arco, 1954
Factual, story telling and biographical. Background information on music.

Faulkner, Anne Shaw
What We Hear in Music
Camden, New Jersey, Victor Talking Machine Co., 1928
Comprehensive guide. Biographies, stories of opera. Growth of symphony orchestra. List of records.

Ferguson, Donald N.
History of Musical Thought, 3rd ed.
New York, Appleton-Century-Crofts, 1959
Text for college use. Historical approach and very technical. No separation of fundamentals from text proper.

Ferguson, Donald N.
Masterworks of the Orchestral Repertoire: A Guide for Listeners
Minneapolis, University of Minnesota, 1954
Commentary on specific pieces originally written for performances by the Minneapolis Symphony Orchestra. Superficial analysis, no elements of music.

Finney, Theodore Mitchell
Hearing Music: The Art of Active Listening
New York, Harcourt Brace and Co., 1941
Some elements, poorly verbalized and little system of organization.

Fishburn, Hummel
Fundamentals of Music Appreciation
New York, Longmans Green, 1955
Cannot teach appreciation (p. 3) Appreciation synonomous with enjoyment; based as melody, harmony, rhythm, timbre, form.

Fisher, Wm. R.
The Construction and Validation of an Instrument to Measure Music Appreciation
Doctoral Dissertation, Boston, Boston University, 1949
Measurement of music appreciation--interest lies mainly in statistics and testing, little concentration on perception of music.

Fiske, Roger
Listening to Music: A Guide to Enjoyment, 2nd ed.
London, G.G. Harrap, 1964
Primary concern with external descriptions. Orchestral instruments and program music take up large portion of matter.

Fleming, William and Abraham Veinus
Understanding Music
New York, Henry Holt, 1958
Sketchy. Seems to take Beethoven as norm for all examples.

Gernet, Sterling L.
Musical Discrimination at Various Ages and Grade Levels
College Place, Washington, The College Press, 1940
Concerned with mechanism of testing and psychology rather than musical factors.

List B (cont.)

Gest, Elizabeth
What Every Junior Should Know About Music
Boston, Boston Music Co., 1935
Short history; music forms discussed and short life sketches of composers.

Gillet, Frances M.
The Aesthetic Approach to Music Appreciation
MM Thesis, Ann Arbor, University of Michigan, 1951
Studies the effect of music and how to get the effect across but never looks at the music itself to answer question of why the particular effect occurs.

Goetschius, Percy
The Homophonic Forms of Musical Composition
New York, G. Schirmer, Inc., 1926
On fundamentals-phrase, period, song form etc. Forbiddingly divided into a series of outline-form paragraphs; doubtful value.

Goetschius, Percy
The Larger Forms of Musical Composition
New York, G. Schirmer, Inc., 1943
Examples and descriptions of categorical forms, nothing on fundamentals.

Gordon, Dorothy
Treasure Bag of Game Songs
New York, E.P. Dutton and Co., 1939
Volume of singing games.

Grabbe, Paul
Story of One Hundred Symphonic Favorites
New York, Grosset, 1960
Storybook approach.

Graf, Max
Composer and Critic
New York, W.W. Norton, 1946
Written by music critic, 1890-1938 in Vienna. Historical survey of musical criticism (journalism mainly in mind) with no mention of fundamentals.

Gross, Madeline
Beethoven, The Master Musician
New York, Doubleday, Doran and Co., 1931
Another story book.

Gross, Madeline
Deep Flowing Brook
New York, Henry Holt and Co., 1938
Fictional story of early life and family life of Bach.

Haggin, B. H.
The Listener's Musical Companion
New Brunswick, New Jersey, Rutgers University Press, 1956
Laudable approach through use of the music itself. Almost too little verbal material on fundamentals.

Haggin, B. H.
Music for the Man Who Enjoys Hamlet
New York, Random House, 1944
For sophisticated adult. Complex reference system for analysis, nonmusical terminology.

Hahn, Marcus E.
A Proposed Technique for Investigating the Relationship Between Musical Preferences and Personality Structure
Doctoral Dissertation, University of Kansas, 1954
Relates preference to personality type.

Hallstrom, John
Relax and Listen: How to Enjoy Music Through Records
New York, Toronto, Rinehard and Co., Inc., 1947
Centers around composers, instruments, definitions, terminology.

List B (cont.)

Hansen, Peter S.
Introduction to 20th Century Music
Boston, Allyn and Bacon, 1961

Textbook survey. Takes knowledges of music fundamentals for granted. Discussion of composers and specific works make extensive listening program mandatory.

Harris, Cuthbert
The Student's Short Course in Musical Forms
Boston, Arthur P. Schmidt, 1945

Hartshorn, Wm. C. and Helen S. Leavitt
Making Friends with Music
Boston, Ginn and Co., 1940

Based on specific pieces and composers. No insight into fundamentals. Logic behind organization is difficult to see.

Hicks, Beulah M.
The Key to Listening
Dubuque, Iowa, W.C. Brown, 1954

Factual outline. No understanding of music itself.

House, Margueritte
O Say Can You Hear?
New York, Mills Music, 1947

Story approach.

Hughes, Charles W.
The Human Side of Music
New York, Philosophical Library Inc., 1948

A fascinating book from the standpoint of "music as an expression of certain needs of society." (xvii). First half a fine supplement for teachers. No fundamentals.

Hunt, Reginald
The Musical Touchstone
A Course in Music Appreciation
London, Boosey and Hawkes, Ltd., 1946-48

Primarily an analysis of specific works. Uses the keyboard. No fundamentals.

Jacobs, Robert Louis
Harmony for the Listener
New York, Oxford University Press, 1958

No discussion of fundamentals, only a routine description and categorizing.

Johnson, Wm. W.
Intelligent Listening to Music: A Guide to Appreciation and Enjoyment
London, I. Pitman, 1948

No clear presentation of fundamentals. Tends toward false generalizations and sketchiness.

Jones, Archie N. and Floyd Barnard
Introduction to Musical Knowledge
Minneapolis, P. A. Schmidt Music Co., 1935

Covers theory, harmony, history, musical form, instruments and biographies of best known composers.

Katz, Adele T. and Ruth H. Rowen
Hearing, Gateway to Music; A Complete Foundation for Music Understanding
Evanston, Illinois, Summy-Birchard Publishing Co., 1959

Presentation of 253 brief excerpts with short comment on each. Method unpalatable and fundamentals obscured.

Keston, Morton J.
An Experimental Evaluation of the Efficacy of Two Methods of Teaching Music Appreciation
Doctoral Dissertation, University of Minnesota, Minneapolis, 1949

Testing for music preference and recognition to decide between two schools of thought, exposure and augmented exposure. Concerned more with methods and materials

List B (cont.)

Kincella, Hazel G.
Around the World in Story
New York, University Publishing Co., 1939
Stories of nations, presenting ideals, customs, legends and history. Folk songs and familiar tunes.

Kincella, Hazel G.
History Sings
New York, University Publishing Co., 1940
History of American music. Pilgrims to present day. Hopkinson, Billings, Mason, Root, Nevin, Foster, Parker, Paine, and MacDowell.

Kinscella, Hazel G.
Music and Romance, 2nd ed.
Camden, New Jersey, RCA Mfg. Co., 1941
Factual, some attempt at historical presentation. Superficial treatment but loaded with stories.

Kincella, Hazel G.
Tales of Olden Days
New York, University Publishing Co., 1939

Beginnings of music, ancient minstrels, lead to story of DeKoven's opera Robinhood. Lives of Greeks, Italians and Euopean musicians. Songs, singing games, ballads, art, songs, and arias. Old legends, historical tales, etc.

LaPrade, Ernest
Magic of Music
Ottenheimer, 1958

Liepmann, Klaus
The Language of Music
New York, The Ronald Press Co., 1953
A lot of fundamentals. Presented to look complex.

Lortie, Jeanne Marie
Music Appreciation for the Elementary Schools
Cincinnati, Willis Music Co., 1962
Games and facts with no relation to music. "Music appreciation cannot be taught but it can be developed" p. 47.

Lynch, Virginia and Edna Vance Hamilton
Music and Musicians
New York, Allyn and Bacon, 1939
History of music for young. Shows start of music with simple dance form and how composers took these and made sympohonies, sonatas and suites from them. Incidents in lives of Bach, Beethoven, Mozart and Brahms mentioned. Evolution of opera and oratorio.

Machlis, Joseph
The Enjoyment of Music
New York, W.W. Norton and Co., 1956
Discussion of specific composers and works, little on fundamentals.

Machlis, Joseph
Introduction to Contemporary Music
New York, W.W. Norton, 1961
Tries to cover a lot of material and so skims the surface. Primarily concerned with categorization by composer, elements become sketchy because of attempt to define modern techniques by comparison with classicist and romantic in a few pages.

Macy, James O.
Young People's History of Music
Philadelphia, Theodore Presser Co., 1914
Child's history of music.

List B (cont.)

Mason, Daniel Gregory
The Appreciation of Music Series
A Guide to Music for Beginners and Others
New York, The H.W. Gray Company, 1910

Discussion of fundamentals but not useful as illustrations used without drawing concrete conclusions. Undesirable use of nonmusical elements to get across musical features (I chord compared to an easy chair).

McGehee, Thomasine (Cobb)
People and Music; A textbook in music appreciation
Boston, Allyn and Bacon, 1929

Text for junior high school use. Nothing but stories.

McGehee, Thomasine
People and Music
Boston, Allyn and Bacon, 1931

Function of music in the lives of people. Large section on America as a music loving land.

McKinney, Howard D. and W. R. Anderson
The Challenge of Listening
New Brunswick, New Jersey, Rutgers University Press, 1943

Music as a sort of nerve tickler. Language "The music of men like Bach, Handel and Telemann...possess(es) a certain strangely baroque quality."

McKinney, H. D. and W. R. Anderson
Discovering Music
New York, American Book, 3rd ed., 1952

Little on fundamentals. Standard approach through Les Preludes, Till, L'Apres Midi etc.

McKinney, Howard D.
Music and Man
New York, American Book Company, 1948

All music presented as background for American music. Illustrations date the book.

Miller, William H.
Introduction to Music Appreciation
Philadelphia, Chilton, 1961

Very brief sktchy outline with concentration on recommended listening lists.

Moore, Douglas
From Madrigal to Modern Music
New York, W.W. Norton, 1942

Historical-factual approach. No fundamentals.

Moore, Douglas Stuart
Listening to Music, Revised Edition
New York, W.W. Norton and Co., 1937

Elements of music, emphasis on instrumental music. Against program music--attempts to introduce musical concepts.

Moore, E. V. and G. McGeoch
Syllabus for the Introduction to Music Literature
Ann Arbor, Michigan, J.W. Edwards, 1954

Series of one-page charts each on specific pieces giving information on the work. Descriptive--on themes and use of instruments, etc.

Murphy, Howard A.
Form in Music for the Listener
Camden, RCA Manufacturing Co., 1948

Nixon, Rogert A.
The Evaluation of Selected Instructional Materials and Procedures which Facilitate the Understanding of, and Voluntary Listening to Music
Doctoral Dissertation, University of California

Traced melodies of popular songs with two matched groups. Doesn't get at the problem.

Norman, Gertrude
First Book of Music
New York, Watts, 1954

Story telling approach. No fundamentals.

List B (cont.)

Oberndorfer, Anne Shaw (Faulkner)
What We Hear in Music, 12th ed.
Camden, New Hampshire, RCA Mfg. Co., 1943
Organized around vocal music and nationalism; content is mostly historical and factual.

Paget, Violet (Vernon Lee)
Music and Its Lovers
London, Allen and Unwin, Ltd., 1932

Pepinsky, Minerva
Sixth Grade Children's Attitudes Toward Music of Gluck, Haydn, Mozart, and Toward Other Music
Ann Arbor, Michigan, University of Microfilms, 1959
Like-dislike on a small sample.

Phillips, Helen E.
A Study of Some Problems of Music Appreciation Courses in the Liberal Arts College
Master's Thesis, Eastman School of Music. Rochester, University of Rochester, 1944
Concerned with administrative history of the courses rather than their content. No fundamentals.

Potter, Edna
This Way and That
New York, Oxford University Press, 1939
Book of singing games.

Pratt, Carroll C.
The Meaning of Music
New York, McGraw Hill Book Co., Inc., 1931
Concerned with psychological approach to music.

Pratt, Carroll C.
Music as the Language of Emotion
Washington D.C. Library of Congress, Louis Charles Elson Memorial Fund, 1950
Nothing on fundamentals. Seems to support use of vocabulary of nonmusical terms.

Purdy, Claire Lee
He Heard America Sing
New York, Julian Messner Inc., 1940
Story of Stephen Foster.

Purdy, Claire Lee
Song of the North
New York, Julian Messner Inc., 1941
Edward Grieg.

Rafferty, Sadie
Music Appreciation: An Active Force in Child Development
New York, Silver Burdett Co., 1939

Richardson, Henry Handel
The Young Cosima
New York, W.W. Norton and Co., 1939
Life of Liszt through writings of Cosima. Gets some Wagner and Van Bulow in there.

Ripley, Frederick and Elizabeth Schneider
Art-Music Reader
New York, Atkinson, Mentzer and Co., 1916
Attempts to correlate art, music and literature.

Roberts, Mary Newlin
Young Masters of Music
New York, Thomas Y. Crowell Co., 1931
Composers as human beings with real emotions, full of determination that led to inevitable accomplishments. Lots of "important" incidents.

Rubin, Louis J.
The Effects of Musical Experience on Musical Discriminations and Musical Preferences
Doctoral Dissertation, University of California, Berkeley, 1952
Relation of amount of experience with ability to discriminate.

Russell, M. E. and H. Harris
Guide for Exploring Music
Dubuque, Iowa, W.C. Brown, 1955
Series of questions and answers with sketchy fundamentals.

List B (cont.)

Salzer, Felix
Structural Hearing
New York, Charles Boni, 1952
Based on Schenker's theory of overall structural unity by reference to the tonic chord. Extremely technical and assumes the reader has fundamentals at his command.

Sargeant, Winthrop
Listening to Music
New York, Dodd Mead and Co., 1958
An anthology of daily and weekly concert reviews. Basic point is that all great music is written in the framework of a tradition. Little discussion of the music--more concerned with plots, production commentaries and generalities.

Schmitz, Mary N.
Little Life Stories of the Great Masters
Philadelphia, Theodore Presser Co., 1925
Composers from Bach to MacDowell. Set of questions and answers from the life stories of the great masters, interesting events.

Schoen, Max
The Effects of Music
New York, Harcourt Brace and Co., Inc., 1927
Scientific study using research methods and tools; collected essays on types of listeners, sources of musical enjoyment, mood effects, effects of repetition and familiarity. Deals primarily with influence of music rather than with music itself.

Schoen, Max
The Understanding of Music
New York, Harper and Brothers, 1945
Aesthetics with reference to works of others. No fundamentals.

Scholes, Percy A.
Complete Book of the Great Musicians
London, Oxford University Press, 1949
Biographical story telling. Heavily English slanted.

Scholes, Percy Alfred
Listener's Guide to Music
New York, Carl Fischer, 1933
Vague on fundamentals, specific on cute stories.

Scholes, Percy A.
Listener's Guide to Music with a Concert-goer's Glossary
London, Oxford University Press, 1948

Scholes, Percy A.
The Listener's History of Music 4th ed.
New York, Oxford University Press, 1954
For the untrained music lover. Vague and composer centered.

Scholes, Percy A.
Miniature History of Music for the General Reader and the Student, 4th ed.
London, Oxford University Press, 1955
Misunderstanding of the elements of music.

Schroeder, Ira
Listener's Handbook, A Guide to Music Appreciation
Ames, Iowa, Iowa State University Press, 1962
Elementary.

Schwimmer, Franciska
Great Musicians as Children
New York, Doubleday, Doran and Co., 1939
Biographies of composers such as MacDowell, Mozart, and Damrosch. Incidents in composer's lives that children can understand.

List B (cont.)

Scobey, Katherine and Olive B. Horne
Stories of Great Musicians
Cincinnati, American Book Co., 1933
Biographies of Bach, Beethoven, Handel, Haydn, Mozart, Mendelssohn, Chopin, Wagner, Schumann, and Schubert. Incidents in their lives in an attractive manner with pictures.

Shaw, Bernard
How to Become a Musical Critic
Edited by Dan H. Laurence, New York, Hill and Wang, 1961
A witty collection of Shaw's music reviews written from 1876-1950 for the London Star and World. Worth reading for teachers.

Shaw, George Bernard
Shaw on Music
New York, Anchor, edited by Bentley, 1955
A collection of Shaw's pieces written as music critic in London. Fascinating reading but not useful for teaching.

Siegmeister, Elie
Invitation to Music
New York, Harvey, Irvington-on-Hudson, 1961
A few fundamentals, a lot on instruments and composers with technical material in the back.

Simon, Richard George
Teaching Music Appreciation Reflectively Through Problem Solving at the College Level
Master's thesis, Ann Arbor, University of Michigan, 1951
No fundamentals.

Skolsky, Syd.
Evenings with Music
New York, E.P. Dutton and Co., 1944
Mostly analysis of standard symphonic works. Emphasis on instruments and themes.

Skolsky, Syd.
Music Box Book
New York, E.P. Dutton, 1946
Storytelling with no mention of the music itself.

Smith, Edgar H.
An Experiment to Determine the Value of Notated Thematic Excerpts Relative to the Recognition of Aural Musical Themes
Doctoral Dissertation, New York University, 1952

Sorantin, Erich
The Problem of Musical Expression
Nashville, Marshall and Bruce Co., 1952
Deals with psychological and aesthetic musical values. A long list of specific pieces used in a doctoral dissertation as test cases in the problem of music expression.

Soule, Robert C.
A College Course in Music Appreciation Through Participation
Doctoral Dissertation, Teachers College, Columbia University, New York, 1950
A study of student contribution in class to music appreciation. Concerned with performance and student reaction.

Spaeth, Sigmund Gottfried
The Art of Enjoying Music
New York, McGraw Hill Book Co., 1938
Deals with types of music. Extreme categorization without ever striking anything essentially musical.

Spaeth, Sigmund
Common Sense of Music
New York, Boni and Liveright, 1924
Musical elements badly presented in an effort to be entertaining (see p. 132).

List B (cont.)

Spaeth, Sigmund
Guide to Great Orchestral Music
New York, Modern Library, 1943
Primarily a biographical dictionary. Nothing before Bach and mainly 19th century. Includes many composers not considered "great" today.

Spaeth, Sigmund
Maxims to Music
New York, Robert McBride and Co., 1939
Traditional proverbs, mottos and maxims of the world set to music.

Spencer, Herbert
Literary Style and Music
New York, Philosophical Library, Inc., 1951
The two main essays are on Philosophy of Style (Literature) and the Origin and Function of Music. Deals with aesthetics.

Stokowski, Leopold
Music for All of Us
New York, Simon and Schuster, 1935
Organized by scales, polyphony, fugue, opera, form, etc. Rambles; fundamentals buried in narrative.

Storr, Muriel
Music for Children; First Steps in Appreciation
Boston, E.C. Schirmer Music Co., 1939
Use of physical movement in musical training. (Dalcroze system)

Stringham, Edwin John
Listening to Music Creatively
Englewood Cliffs, New Jersey, Prentice-Hall Inc., 1946
College level, good use of paintings. Potentially good chapters on music and the dance, music and the ceremony, and music and religion.

Tapper, Thomas
First Year Music History
New York, Arthur P. Schmidt Co., 1926

Taylor, Deems
Of Men and Music
New York, Simon and Schuster, 1937
Concerned with composers.

Taylor Deems
Music to My Ears
New York, Simon and Schuster, 1949
Series of radio talks on a variety of topics. Interesting reading.

Taylor, Deems
Well-Tempered Listener
New York, Simon and Schuster, 1940
A collection of essays based on a series of radio talks, with articles and reviews written by Taylor as a critic. General categories of music from the composer's point of view, performance and listening. One must dig for the gems.

Thompson, Virgil
The Art of Judging Music
New York, Alfred A. Knopf, 1948
Collection of Herald Tribune (NY) articles by Mr. Thompson written between September 1944 and August 1947 on varied topics. Includes many concern reviews. Deals with criticism on a rudimentary basis, sets up no workable method.

Thompson, Oscar
How to Understand Music and Enjoy It
New York, Premier Books, 1958
Primarily stories of composers and operas. No fundamentals.

Tischler, Hans
The Perceptive Music Listener
Englewood Cliffs, New Jersey, Prentice-Hall Inc., 1955
Part I--Place of music in society.
Part II--Historical organizational system interferes with learning. Forbidding for the beginner.

List B (cont.)

Tobin, Joseph Raymond
Music and the Orchestra
1961
Deals with orchestra and some history.

Toch, Ernst.
The Shaping Forces in Music
New York, Criterion Music Corporation, 1948
Packed with musical examples but fundamentals have to be dug out.

Ulrich, Homer
The Education of a Concert Goer
New York, Dodd, Mead and Co., 1949
Informal style of introduction to music-narrative. Interesting reading; fundamentals mixed in with anecdotes.

Vandevere, Lillian
Great Men Who Made Music
New York, Schoeder and Gunther, Inc., 1936
A notebook with cut-out pictures of composers.

Viggiano, F.A.
Music Listening Evaluation Form
Dubuque, W.C. Brown, 1958
Form contains period and programatic idea, balance, unity, contrast, melodic, monodic, polyphonic etc. An interesting idea but heavy emphases on personal reaction, instrumentation and mood adjectives. Emphasis on performance rules out usability.

Walker, Alan
Study in Musical Analysis
New York, Free Press, 1963
Deals with the principles of unity in music influenced by views of Schenker, Riti, Schoenberg and Hans Keller. Fascinating reading.

Watson, Karl Brantley
An Experimental Study of Musical Meanings
Doctoral Dissertation, Duke University, Durham, 1939
Measurement of responses to music by testing.

Wedge, George Anson
The Gist of Music; A Ready Key to Musical Understanding and Enjoyment
New York, G. Schirmer, Inc., 1936
Keyboard exercises and description of examples which do not bear related concepts.

Welch, Roy D.
The Appreciation of Music
New York, Harper and Brothers, 1945
Concerned primarily with forms. Fundamentals treated sketchily.

West, Alvaretta
Signposts to Music
New York, Carl Fischer Inc., 1935
Melody, Rhythm, Harmony, Form, Orchestra and Composers. Appropriate songs and records to illustrate work covered.

Wheeler, Benson and Claire Lee Purdy
My Brother was Mozart
New York, Henry Holt and Co., 1937
Written as if by his sister. Gives meanings and explanations of unfamiliar musical words and phrases at end of book.

Wheeler, Opal and Sybil Deuscher
Curtain Calls for Joseph Haydn and Sebastian Bach
New York, E.P. Dutton, 1939
Two musical plays to be acted out.

Wheeler, Opal and Sybil Deuscher
Edward MacDowell and His Cabin in the Pines
New York, E.P. Dutton and Co., Inc., 1940
Fictional life of MacDowell for children.

List B (cont.)

Wheeler, Opal and Sybil Deuscher
Franz Schubert and His Merry Friends
New York, E.P. Dutton and Co., 1939

Each chapter is concerned with a period in Schubert's life.

Wheeler, Opal and Sybil Deuscher
Joseph Haydn: The Merry Little Peasant
New York, E.P. Dutton and Co., 1936

Child's story of Haydn.

Wheeler, Opal and Sybil Deuscher
Mozart: The Wonder Boy
New York, E.P. Dutton and Co., 1934

Child's story with some keyboard examples.

Wheeler, Opal and Sybil Deuscher
Sebastian Bach: The Boy from Thuringia
New York, E.P. Dutton and Co., 1937

Emphasis on large number and range of compositions. Has samples of his music. Child's story.

Williams, Wyndham G.
Looking and Listening: An Introduction to Musical Appreciation
1960

Takes a notational approach to music. No discussion of fundamentals.

Witcomb, Ida Prentice
Young People's History of Music
New York, Dodd, Mean and Co., 1917

Traces music from early Chinese to present day. Not technical or exhaustive. Has song and dance forms and lives of great composers.

Woods, Elizabeth (Robinson)
Music and Meaning
Cambridge, Harvard University Press, 1932

Aesthetics. No fundamentals or discussion of actual music.

Chapter II

"In an earlier period a common belief was that researchers could and would find definitive answers to questions about what and how to teach and correspondingly, how to organize and administer the schools." No longer, however, do researchers expect to obtain direct answers to questions; the functions of research are to assess programs, procedures and materials, to build up a body of information, and to provide the outlook, the stimulation and the guidance for educational innovation.[1]

This project, although related to the public school curriculum, did not have as its objectives the development of a curriculum in elementary music; it did not attempt to determine what an aesthetic experience is in music; neither did it attempt to discover what constitutes a desirable musical experience in listening. A survey of the literature on musical listening reveals a growing concern with the aesthetic experience of the listener, and the belief that this is not facilitated by "extra musical references" and activities. Disagreement exists, however, as to when a truly musical and hence truly aesthetic experience is possible. The project did not attempt to answer this question. The project focused on two problems, as follows: (1) what would be the skills and knowledges a student would need to participate in the musical experience as described by Leonard B. Meyer's theory of expectation, and (2) can these experiences be successfully taught to fifth grade children?

As with any theory, there are those who disagree with Meyer's premise, who would state as Baldwin does that the listener needs only enough knowledge of the ways a composer uses his materials to enrich his appreciation of the art and dignify the artist. Such a statement reflects the belief that the principal goal of the listener is pleasure--a viewpoint widely held earlier in the century, but on the wane until the cult of contemporary music arose with its need for sufficient exposure to create tolerance (and presumably pleasure) in the new sounds. Interestingly enough, the advocates of contemporary music give hardly more than a nod to the need for understanding modern music in the manner that Meyer and others advocate for all art music of whatever period.

In an intensive scrutiny of the writings on musical listening, the following texts were found to offer adequate areas of agreement with Meyer and also some real insights of their own into the problem of listening:

Abraham, This Modern Music
Cooper, Learning to Listen
Ratner, Music - The Listener's Art
Ulrich, Music: A Design for Listening
Erickson, The Structure of Music
Miller, Introduction to Music: A Guide to Good Listening
Sessions, The Musical Experience of Composer, Performer, Listener
Copland, What to Listen for in Music
Zuckerkardl, The Sense of Music
Hardy and Fish, Music Literature
Liepmann, The Language of Music
Smith, A Plan for Organizing the Laboratory Listening Experiences of a Symphonic Literature Course
Brandt, The Way of Music

All the above authors agree that perceptive listening necessitates a clear awareness of what is going on musically as one listens. None imply that a thoroughly intellectual experience is an adequate one, but rather that a truly musical experience is some mix of knowledge and affect. Further, these authors agree that there are levels of listening which correspond to the level of the hearer's information or understanding, each level providing its own kind of enjoyment. The more musical details noticed and understood, the more material available for enjoyment.

Extensive documentation of the above could be made, but two statements, the first by Abraham, the British author, will suffice:

> How do you learn to speak and understand a foreign tongue? By two means, each useless without the other. You must learn its grammar to know why the native speaks as he does. And you must have any amount of practice listening to the spoken language, to get your ear accustomed to its inflections and so on. You cannot learn a language merely by going among the people and listening to them--though that is what most people seem to try to do with....music. Nor can one learn to understand a language by poring over grammars and vocabularies alone. You need some sort of guide to the composers' vocabulary and syntax along with a great deal of keen listening practice. But if you are genuinely keen you must realize that ultimately the one thing that matters is the "getting used to" process. No one can help you in that although you need guidance as to what to get used to. No one could learn a foreign language solely through the ear, one must see the words and sentences and learn to read and write them. The parallel holds good with regard to music. The mere listener, no matter how much or how keenly he listens, necessarily remains an outsider.[2]

Ulrich, an American writer, supports this view:

> A musical experience is first of all an adventure in emotion, but it is also an intellectual adventure. Some stand in the way of complete enjoyment believing that knowledge interferes with pleasure and that it is not good to know anything of a technical nature. A person who listens only from the sensory point of view can make contact only with the tonal material itself; this old fashioned attitude is not to be taken seriously. It is in the details of the composition that the elements are expressed. Each listener must discover independently the significant details and not call up fanciful images.[3]

Teaching, then, is not simply exposure. The student can obtain high quality exposure through concerts, records, FM radio stations, and so forth. Or if it is argued that exposure is the task of the schools, Muzak plus a printed program is admirably equipped to do this. Effective teaching which will accelerate learning requires a certain amount of verbalization. One cannot think without some verbalization, and though the meaning of music cannot be verbalized, and discovery for oneself is critical, guidance to an understanding of musical meanings is essential in teaching. That which is actually taught must be taught to some extent through words and formalized activities.

This project did not concern itself with the basic issues of exposure and verbalization. It made no efforts to answer the question of how listening should be taught in the elementary schools. Again, the problem it sought to answer was to identify the skills and knowledges needed for a musical experience, and to determine whether these skills and knowledges could be taught to elementary school children. Many facets of the study were carried on simultaneously. The remainder of the report is therefore divided, topically rather than chronologically, into (1) Determination of the Elements, (2) Selection of Experiences, (3) Trial Stage and Interpretation and Evaluation.

Determination of the Elements

The initial phase of the study was an effort to determine the elements actually heard in music by expert listeners or those with extensive musical training. Immediately the problem arose of defining "expert." The judgment was made that the heads of departments of music in the four major midwestern universities used for this phase of the project would be best able to identify those of their faculty and graduate students who were accomplished listeners. The task proved more difficult than anticipated; little attention has been given as to what a good listener is or how to identify him. Heads of departments asked their staff and students for help in finding qualified "experts," but accurate identification remained a problem. The musicologist has established himself as the authority on listening; he is usually more experienced in listening, has a wider range of familiar compositions in his "repertoire," and is therefore in a better position to respond to the type of questions posed by this phase of the project. As a group, the musicologists were not found to hear and/or verbalize concerning music any better than music theorists, instrumental performers, or music educators. Forty-three experts were identified and completed a test on what they heard in music. The group included personnel from musicology, theory and composition, performance, music education, and one music librarian.

The test consisted of a "blank score" for six widely contrasting musical compositions, on which the experts were asked to write brief notes at the specific spots where they heard significant happenings in the music. Selections were chosen which would be relatively unfamiliar, the assumption being that an expert listener might make comments from memory on familiar works, rather than recording what he actually heard at a single hearing or a few repetitions. Selections were chosen as representative of the major art periods from Renaissance through Contemporary, in order to discover whether experts tend to hear different elements as important in different styles of music. Those elements to which the knowledgeable listener gives his attention in a Baroque work may be unimportant or even lacking in a piece of Classical music. The "blank score" test was devised as a method by which responses could be pinpointed in the course of the music rather than waiting until a composition was over. The use of a complete line score, although a useful device for teaching listening, was avoided because trained musicians are able to hear better with their eyes than with their ears; it was felt that a score which included even the complete melody or one instrumental part would give too many clues.

The following musical compositions were selected to be used in the experts' blank score. These were selected in consultstion with colleagues in the school of music at the investigator's own campus.

Josquin - Missa Brevis - "Kyrie"
Handel - Trio Sonata
Haydn - Symphony # 55 - 4th movement
Schumann - Symphony # 2 - 4th movement
Delius - Eventyr - "1st part"
Honegger - Chant de joie - "1st part"

Each individual who participated in the test was briefed by the investigator. The following written instructions were also provided.

Explanation of the Project

The research project for which your help is being enlisted is entitled The Theory of Expectation Applied to Musical Listening, and is primarily concerned with attempting to teach fourth grade children how to listen to music of the Classical period. The project will use Leonard B. Meyer's theory of expectation as a basis and is supported by the U.S. Office of Education.

Some preliminary work is necessary to identify as closely as possible those elements in music which the expert listener hears which make the music meaningful for him and which can be taught so the Meyer theory can be applied in the public schools. Identification of every chord, every instrumental timbre, every melodic motif, etc. is of course possible with repeated hearings and a keen ear, but this is not the present object. We hope you will be able to specify those points, or passages, or elements in the music which have the greatest significance or which help in forming an evaluation of the music. These may include the high points of the phrase or of the larger section, places where the unexpected occurs rhythmically, harmonically, dynamically, melodically, texturally, etc., places which illustrate the characteristics of the particular composer, and so on. Most often, these will be the elements which separate the great composer from the "hack" composer.

In order to make such identification as specific as possible, you are given a "blank" score for each composition. The "blank" score has the bare minimum of notes (usually snatches of the first violin part) to help you keep your place without counting measures. As much blank space as possible is left for you to mark the measure or measures in which important things occur. No standardized system of marking is suggested; each listener is to devise his own set of symbols to indicate climax, harmonic interest, important timbre change, arresting rhythm, significant bridge passage, etc., etc.,

etc. Or you may prefer to write a single word or short sentence where feasible. We assume that there will be many measures and passages where you will wish to say nothing; there may also be measures where several important things happen or where several things combine to make the spot an important one. We hope you will be complete but will limit your remarks and notations on the form to those things which seem to you to be of real significance in that composition. Our plan will be to analyze your answers to identify the skills and knowledges necessary and use this as a teaching approach rather than the conventional public school approach. Occasionally you may feel the necessity to explain that knowledge other than purely musical is necessary to fully understand and appreciate the composer's objectives.

Because the mechanics of keeping the place in the "score" will present some difficulty, you may find the best approach is to listen to each composition first without any reference to the blank score form, noting the things you hear as significant so that on repeated listenings with the blank score form you will be prepared to note on the form at least some of the important spots and what makes them important.

No identification of the compositions is necessary. We hope they are not overly familiar, although it is difficult to select representative works which are completely unfamiliar. Each composition is drawn from a different period. On the tapes they appear in this order: Renaissance (blank score B), Baroque (C), Classical (A), Romantic (D), Contemporary (E) and Impressionistic (F). All are instrumental except the renaissance work; all are complete except the impressionist number (there are 5 measures more on the blank score than on the tape) but it seems to be sufficiently lengthy to give opportunity for identifying the important elements.

Anonymity is not necessary, but neither is personal identification--as you wish.

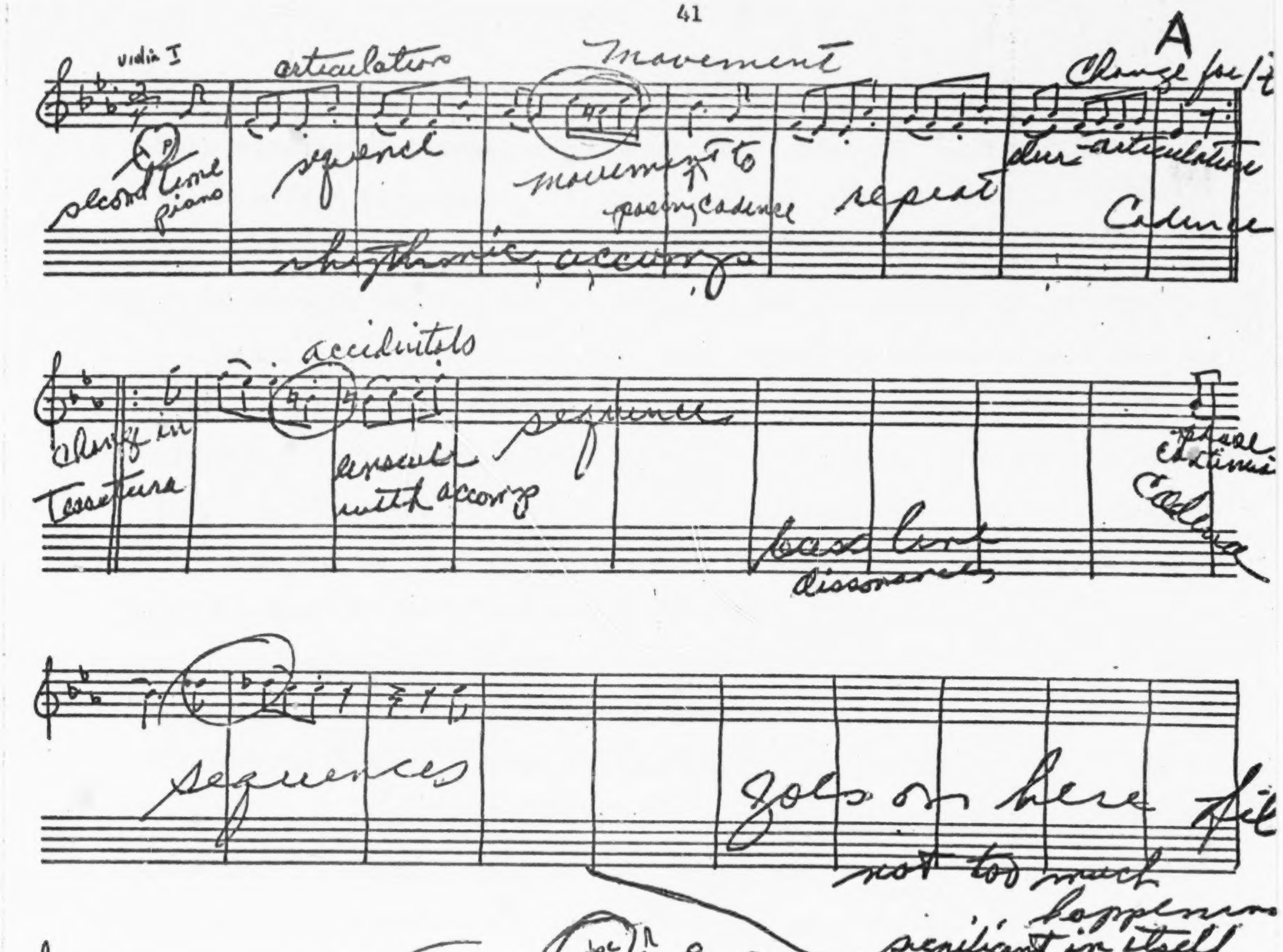
No stipulation was made as to the number of times the expert was to listen to the music in order to identify critical elements. The music was provided on tape to provide private, flexible listening. Being expert, repeated hearings could result in his locating and describing all of the elements in the music; such a totality of information would be of no use to the present study--the selectivity which results from one or a few hearings was much more useful for locating the crucial elements in order to teach them. Items such as tension and release points, introduction of new themes, new keys, use of unexpected harmonies or a change of texture--those things which the trained ear selected on a few hearings would be the elements considered important by that listener; at least for initial hearings. As Ulrich[4] has pointed out, listening is always a process of selection; even the accomplished listener selects what he wants to listen for in any one hearing. Thus if one knows a piece of music to be a theme and variations, he listens carefully for the variation treatments and so hears musical elements that would otherwise be lost.

For the purposes of the study, identification of the critical elements in music was necessary for two reasons. First, in order to derive from them the knowledges and skills which must be taught to children before they can begin to hear music intelligently regardless of approach. Second, in order to confirm that these skills and knowledges were commonly agreed upon and were the same as those implied in Meyer's Emotion and Meaning in Music.

As might be expected, a few of the experts approached declined to take the blank score test. For example, one musicologist stated his belief that "every note of a composition is of equal importance with all the others, and that no discussion of specific elements in the music is possible." This granted, listening like teaching remains a selective process. Careful explanations were made to all the participants that the purposes of the test were to identify elements leading to recognition of the necessary skills and knowledges, and that the test did not imply a teaching method. Some who took the test found it difficult: "the blank score was hard to follow;" "the music went by too fast to make written comments possible;" "the listener has to count measures rather than write." However, on every composition there was a sizeable group of listeners who were able to write outstanding answers on a single hearing, listeners who possessed perceptive ears and fine memories (as well as fast pencils). Obviously the task was not too difficult for the real "expert." This testing technique seems to have real potential; it can no doubt be improved to provide more information, and more reliably, than that obtained in this study. One such improvement might be to provide measure numbers on the taped music without interfering with the music; this would allow for easier following of the abbreviated line score. Some system of "shorthand" to identify various musical elements would also improve the test. As used in this study, the listeners either wrote out in near-sentence form the ideas they wished to express, or simply made a hurried sign such as a check, exclamation point, and so on, to indicate something of importance at that spot. Presumably careful listening by the investigator would reveal what it was at this particular spot the expert felt significant. The check mark further allowed an indication for those items difficult or impossible for the listener to verbalize.

Three sample answers from the experts' "blank score" test are included to illustrate the typical response. These are based upon one hearing of the music. Two are scores for the Classical composition, one for the Baroque work.

Results from the blank score tests were predictable and relatively consistent. Presumably, experts also listen for those things which they have in the past been taught to listen for; therefore, answers tended to show agreement though expressed in differing terms or phrases. However, the test was definitely superior in the information it disclosed to the other process used for determining how experts listen, namely, asking them for their statements of what the important elements are in hearing music. Responses to this latter


A
violin I
articulation
movement
Change for/t
second time piano
sequence
movement to passing cadence
repeat
dur- articulation
Cadence
rhythmic accomp
accidentals
change in tessatura
anacrusis with accomp
sequences
phrase extension
Cadence
bass line dissonances
sequences
goes on here
not too much happening
significant in itself
repeat
doc
dissonance
tone color oboe
flow sustained
Grace No
bassoon
figuration
literal repeat
no change in dynamics
diminuendo
contact through sustained tones
horn
gradual
bassoon typical
especially
high note
strain musically
rhythm
Grace note
Violin
recreation of 1st the

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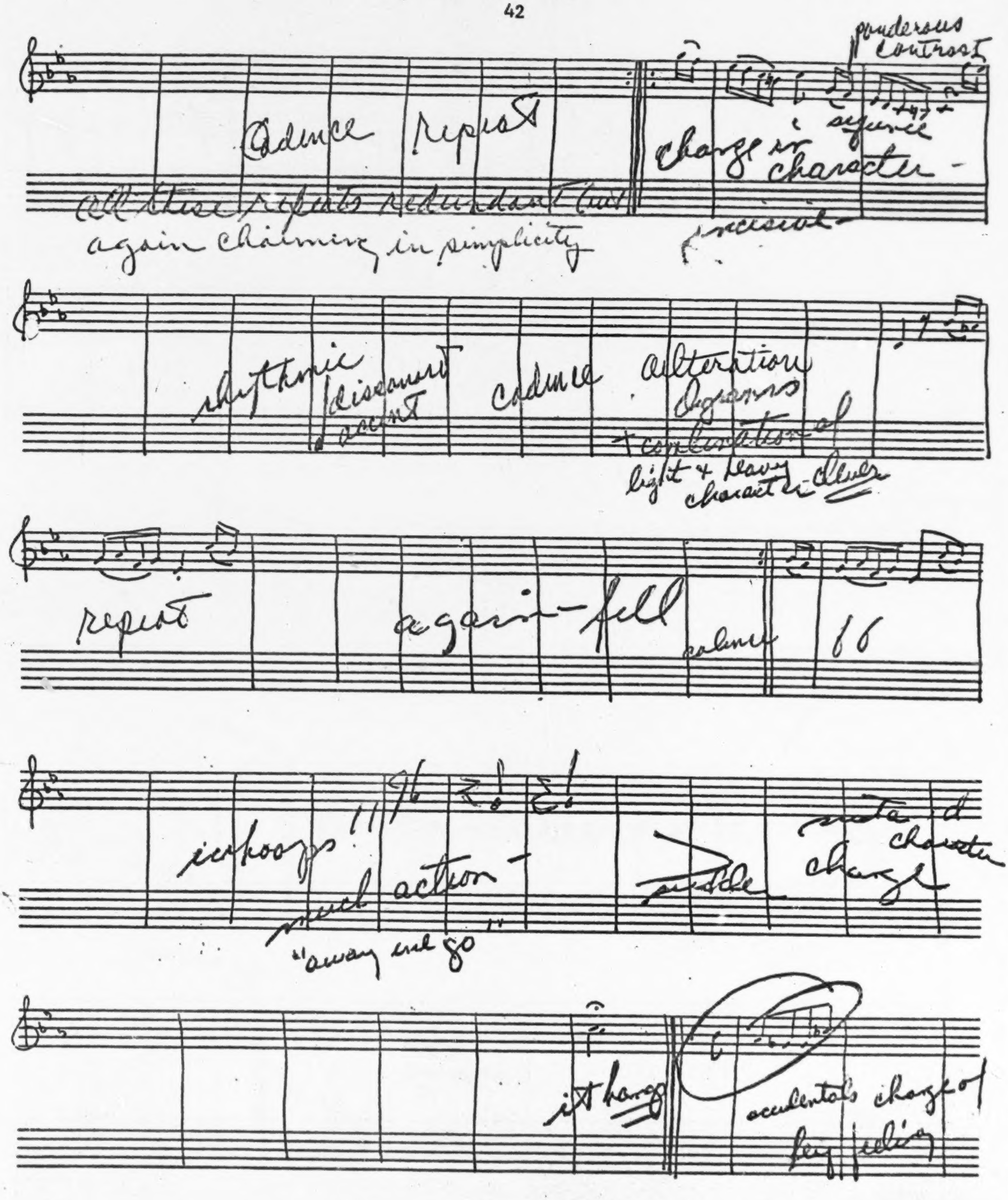
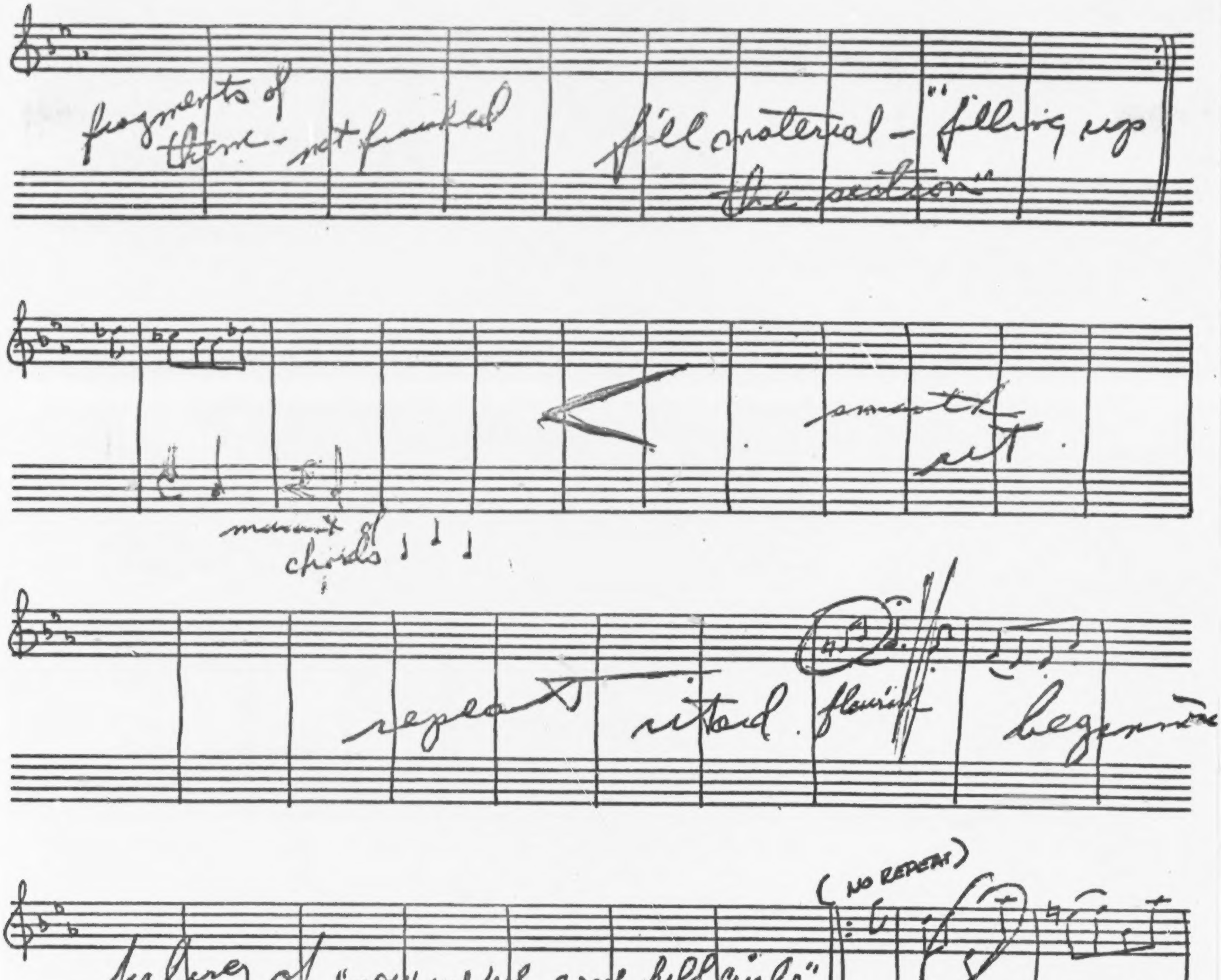

cadence
repeat
change in character
ponderous contrast
sequence
all these repeats redundant but again charming in simplicity
precision—
rhythmic
dissonant accent
cadence
alterations dynamics
+ combination of light & heavy character—clever
repeat
again—full
calmer
ff
whoops!!
much action—
"away we go"
piddle
sustained character change
it hangs
accidentals change of key feeling


fragments of theme - not finished
fill material - "filling up the section"
movement of chords
~~smooth~~ out
repeat
ritard.
flourish
beginning
(NO REPEAT)
feeling of "now we've come full circle"
intervals - again inverted
(NO REPEAT)
oboe
syncop
horn figure
doubling of rhythm patterns

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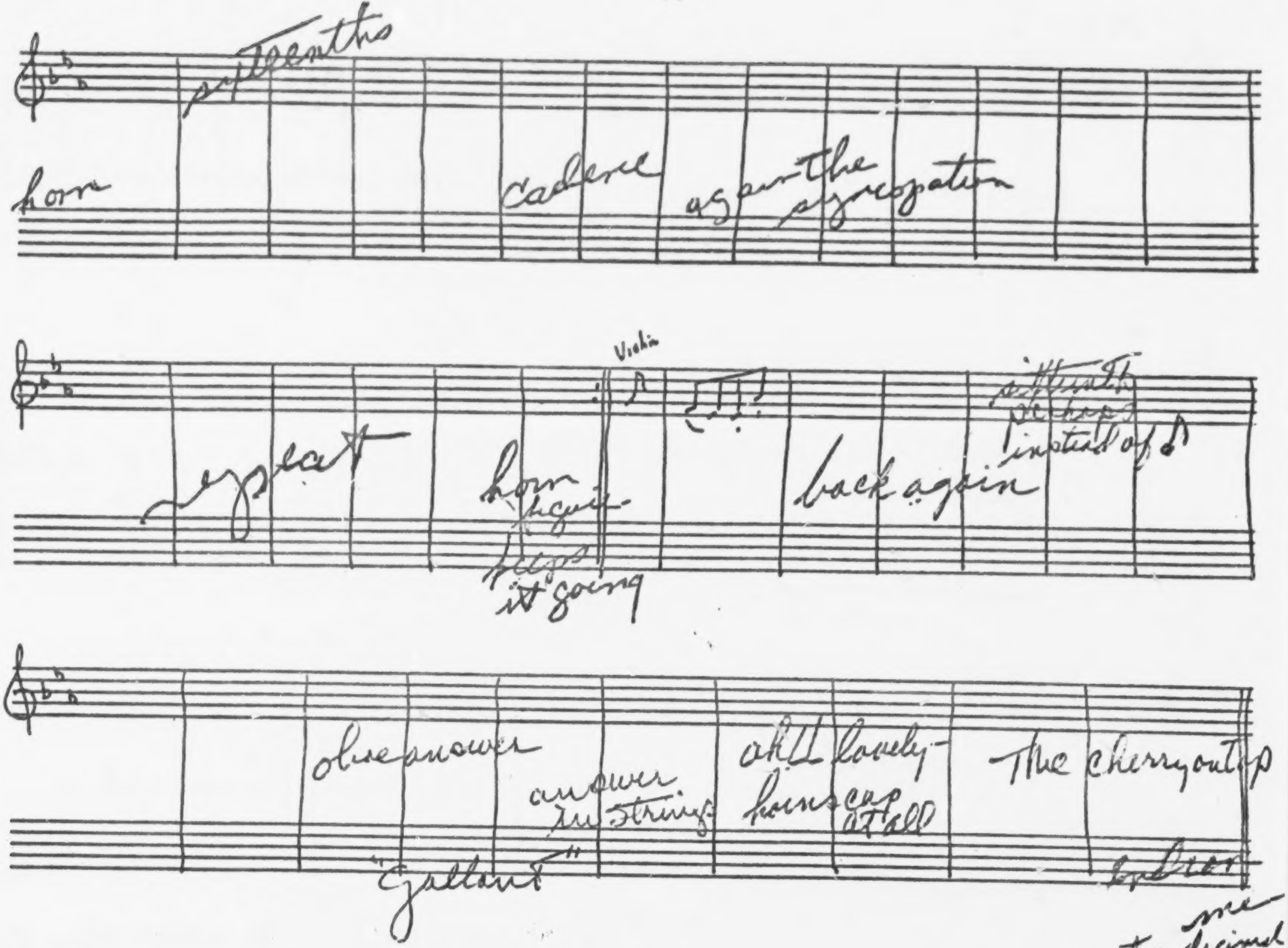
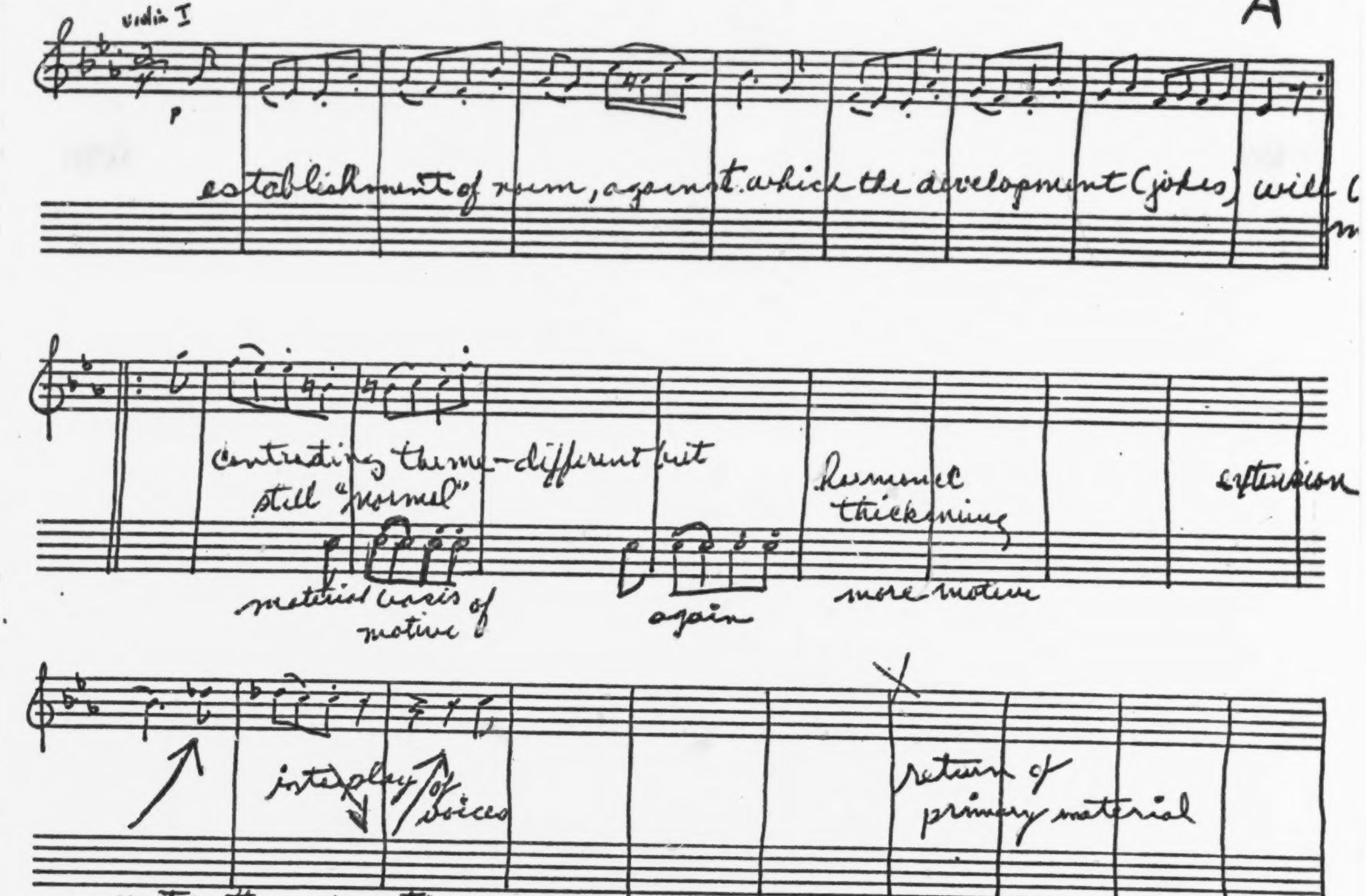

sixteenths
horn
cadence
again the syncopation
Violin
repeat
horn figure keeps it going
back again
alternate perhaps instead of
oboe answer
answer in strings
all horns
lovely - cap it all
The cherry on top
"Gallant"

me
not a decisive
cadence a
[illegible]

In retrospect (after listening) - emphasis on structure + balance little psychological or emotional development of ideas except for a few hints (top of pg. 3). No concern about redundancy - no hurry. Typical dramatic quality of opposition of ideas rather than exploring musical potential of ideas - Mozart rather than Haydn. Occasional surprising seriousness + glimpse of deeper level of concern (p. 2) Exquisite sensitivity to expressions of articulations, accompaniment chords, inner force figures, etc. control over development. Perfect employment of limited tone color - up to a hint of inappropriateness. tremendous utilization of sound-colour of string ranges.

A


Violin I
p
establishment of norm, against which the development (jokes) will (
m
contrasting theme—different but still "normal"
harmonic thickening
extension
material basis of motive
again
more motive
interplay of voices
return of primary material
more strengthening of motive
complete change of sonority, mood, motive, thematic typ
bsn
playful d
playful rhythm in bassoon
sustained, longer phrases here, with pulls tension in there
more contrast
playful horns
Violin

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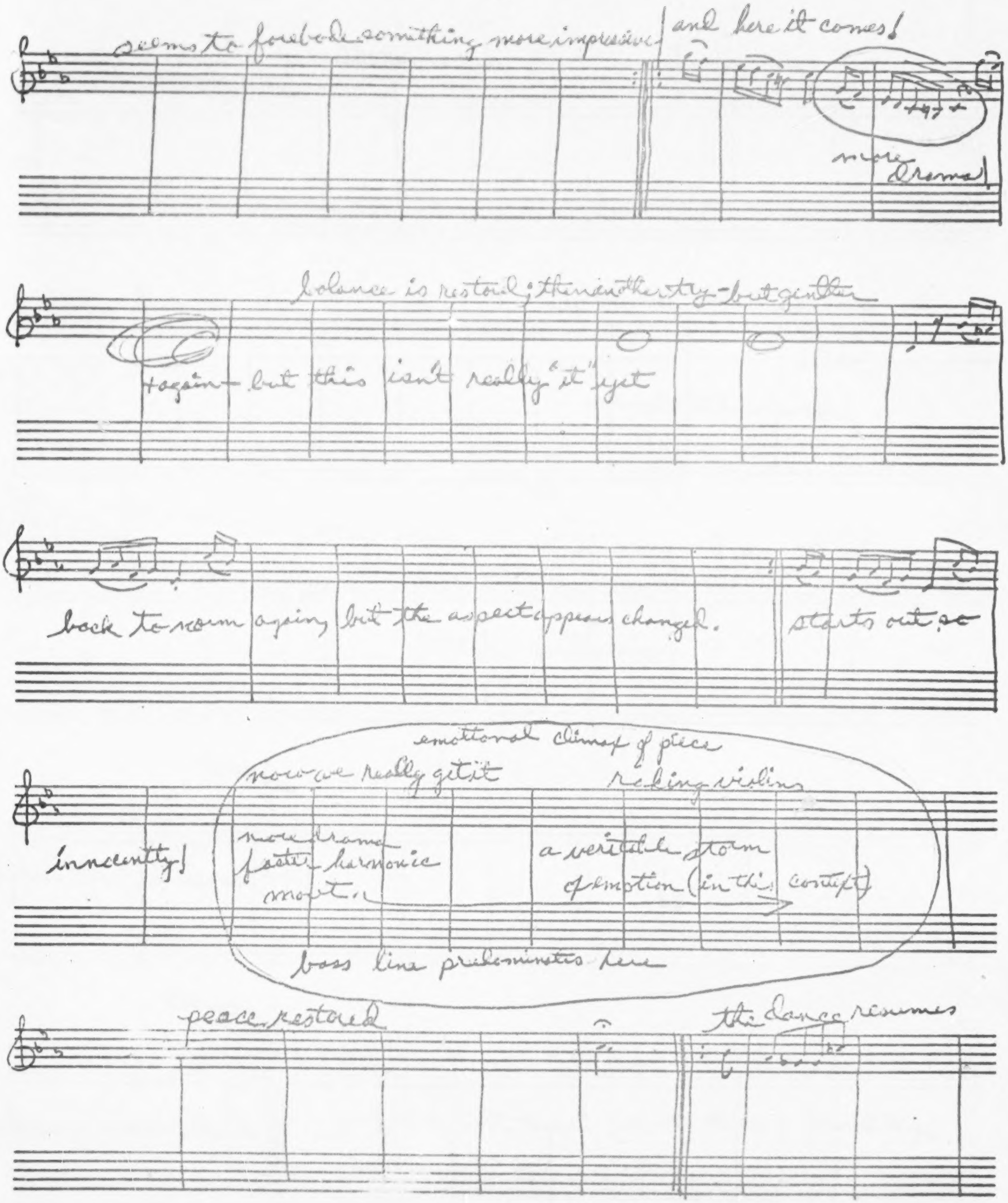
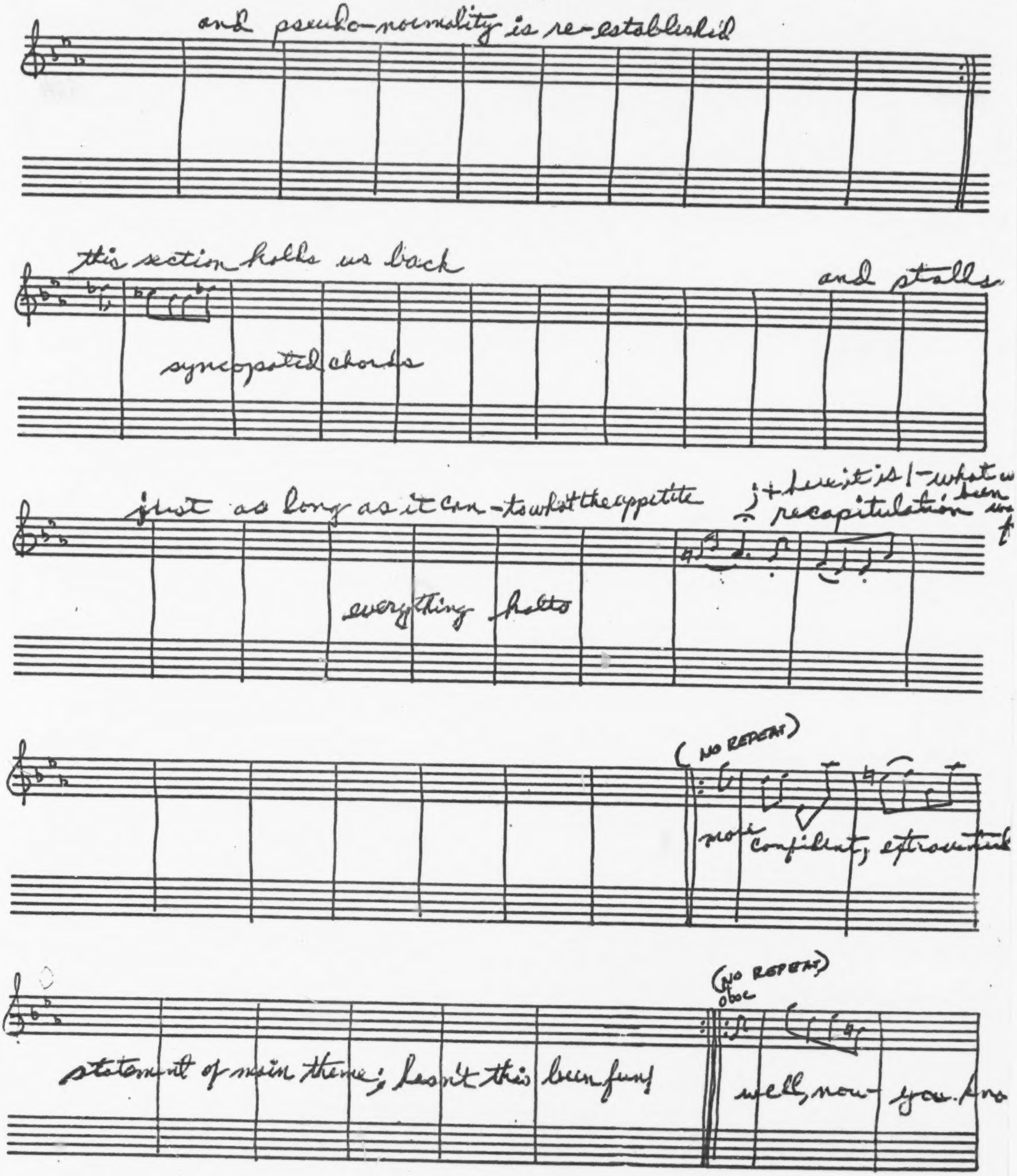
back to main business at hand—but with significant changes
faster motion


seems to forebode something more impressive
and here it comes!
more drama
balance is restored; then another try - but gentler
again - but this isn't really "it" yet
back to norm again but the aspect appears changed.
starts out so
innocently!
emotional climax of piece
now we really get it
rocking violins
more drama
faster harmonic movt.
a veritable storm of emotion (in this context)
bass line predominates here
peace restored
the dance resumes


and pseudo-normality is re-established
this section holds us back
and stalls
syncopated chords
just as long as it can—to whet the appetite
everything halts
+ here it is! — what w
been
recapitulation
wa
f
(NO REPEAT)
more confident, extroverted
(NO REPEAT)
oboe
statement of main theme; hasn't this been fun?
well, now— you kno

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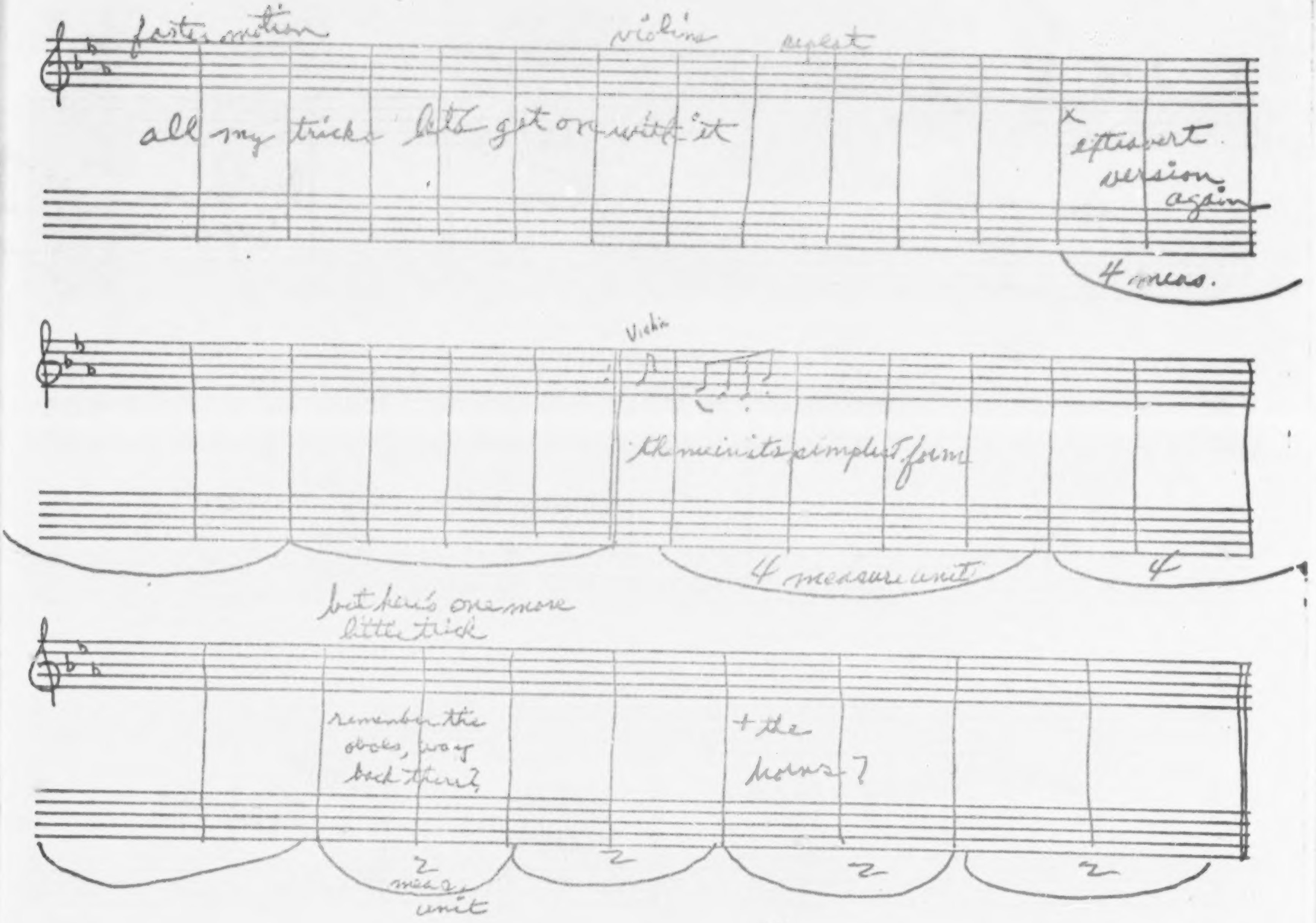
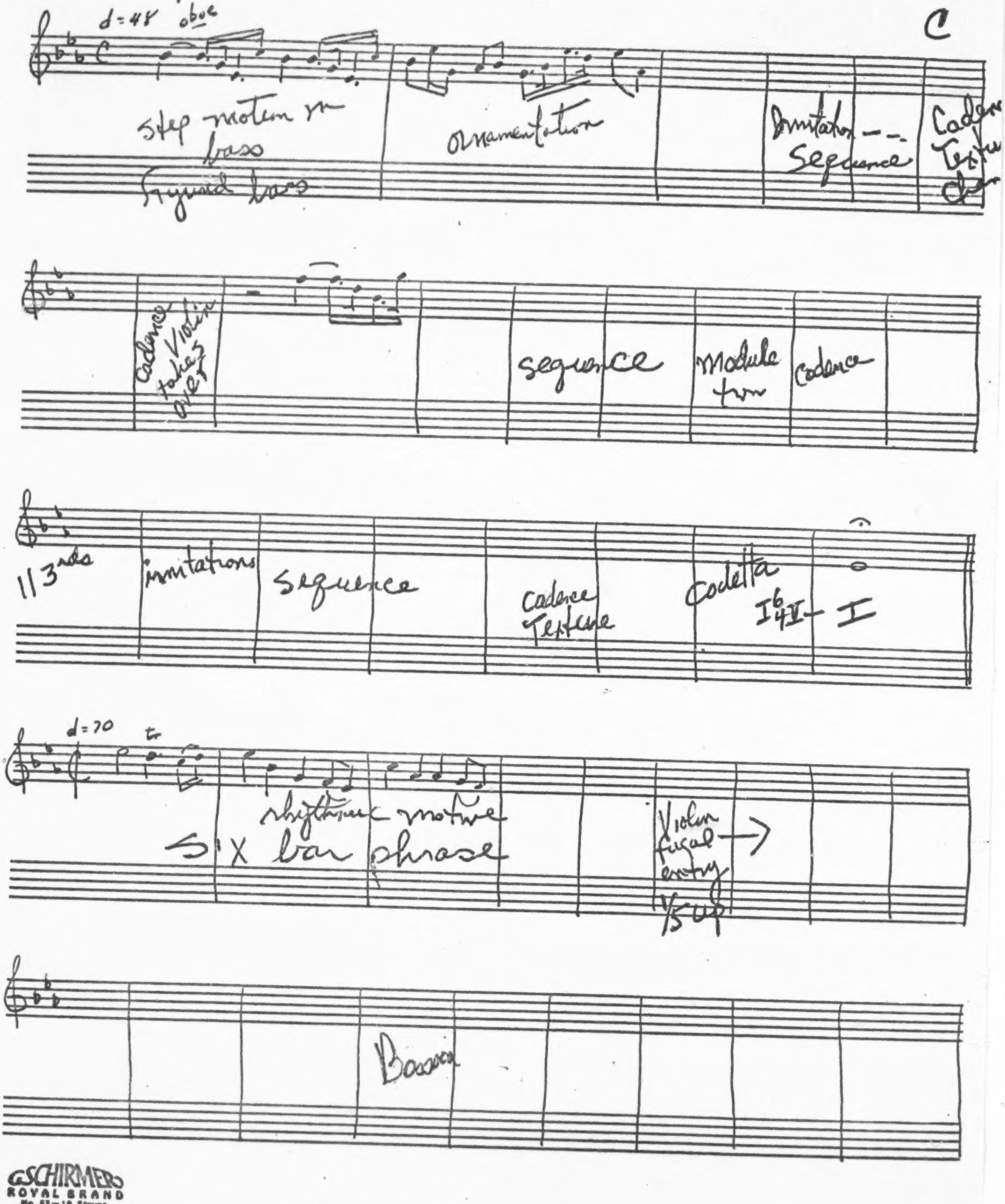

faster motion
violins
repeat
all my tricks let's get on with it
extravert version again
4 meas.
Violin
the unit in its simplest form
4 measure unit
4
but here's one more little trick
remember the oboes, way back there?
+ the horns?
2 meas. unit
2
2
2

But it's all more complex than this "explanation."


C
d=48
1st oboe
step motion in bass
figured bass
ornamentation
Imitation ---
Sequence
Cadence
Texture
cadence
Violin takes over
sequence
module form
cadence
1/3rds
imitations
sequence
cadence
Texture
codetta
I6 4 V - I
d=70
tr
rhythmic motive
six bar phrase
Violin fugal entry
1/5 up
Bassoon

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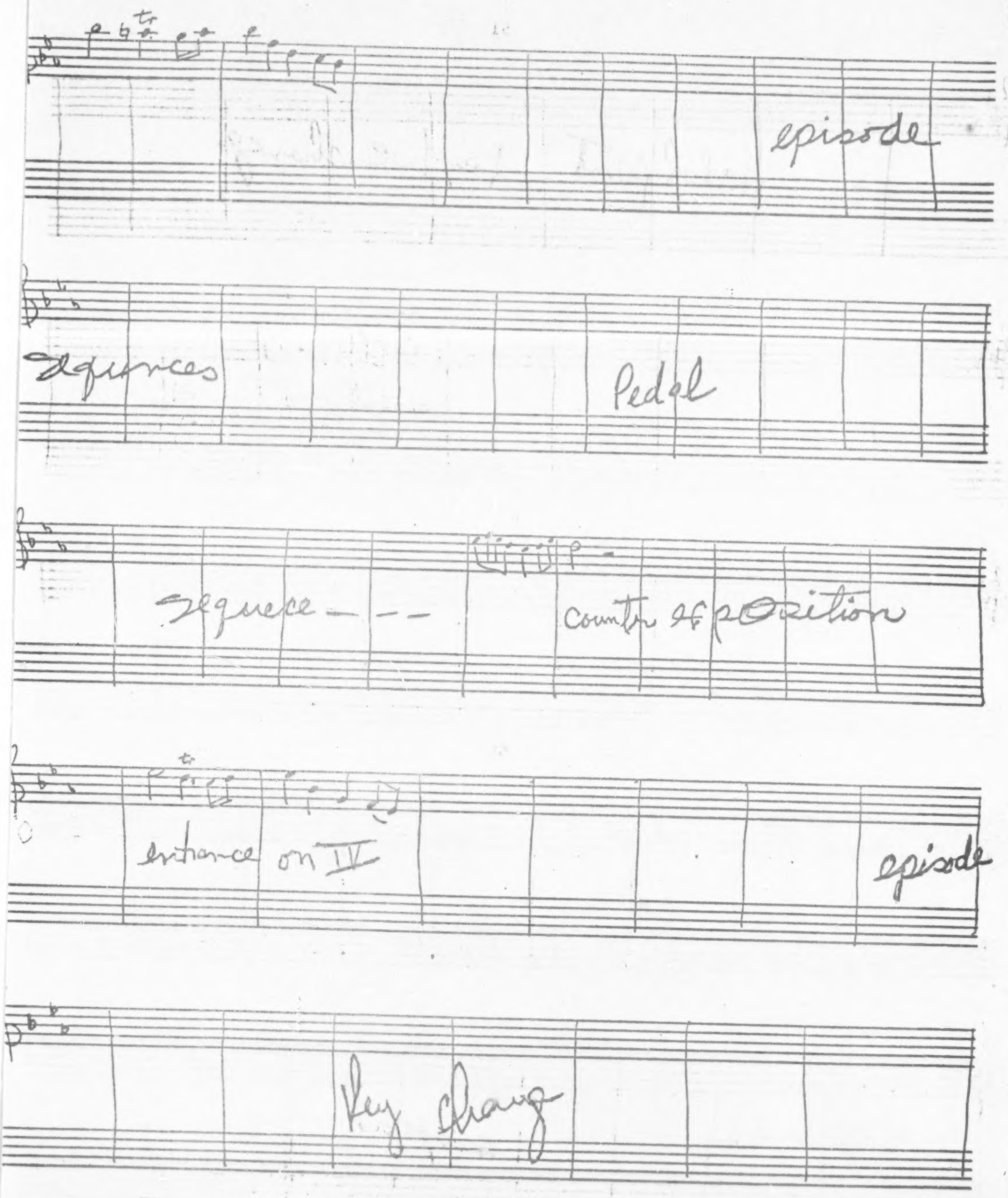
episode
Sequences
Pedal
sequece — — —
counter exposition
entrance on IV
episode
Key chang

pedal point
texture change
tr
restatement
exposition on E♭
adagio
sequence
anticipation

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question were often vague, limited, conventional, or not based upon experience. The same musician who gave a generalized and conventional answer to the question of what was important to listen for in music, often wrote revealing, pointed and insightful comments in response to the music heard for the blank score test. One of the primary blocks in the path to genuinely revealing results from either of these two forms of questioning, was the avoidance of past training and ingrained beliefs. The experts could not get out of their present intellectual environments to take a fresh look (or hearing) at the music and react to it divorced from their acquired reactions. Experts, and lesser experts, listen for the items they have been taught are important; their statements reflect the general statements found in the better textbooks, where agreement was universally present on the important musical elements. Experts did not agree on procedures of teaching; but a large majority indicated that listening to music is a complex business, sophisticated in nature, and that early training in the schools was of great importance if the individual were to listen perceptively as an adult.

For the sake of comparison, some of the listeners were provided with genuine scores to follow as they listened to the selections. Those with scores heard far more in the music than those without; presumably, in some places where a sound actually did not come through on the tape, the individual viewing the score "heard" it. Assisting the listening process visually was highly recommended by the experts, for it enables one to "hear" more. Neither the mind nor the ear has to be as acute when the score is present.

The factor analysis portion of the design suggested in the proposal was not carried out. Members of the review committee at the time of the acceptance of the proposal had serious doubts as to whether anything would be learned from this statistical measure. This view was corroborated by statisticians at the University of Illinois, based on the test data available. Factor analysis may offer valuable information when several listening tests of high quality are available, but at present this is not the situation. A second discouraging influence was the poor inter-correlation of factor analysis studies on music aptitude as reported by Paul Farnsworth[5] in his discussion of the studies of Wing, Drake, McLeish, Vernon, Franklin, Karlin and Bower. Third, the number of items was so great as to make it prohibitive, using only experts.

The following lists offer a fairly inclusive picture of the specific musical elements heard by experts in the six compositions, in most cases on initial contact with the music or upon limited hearings. These elements were considered vital in understanding the music; in almost every case they either specify or imply the use of skills and/or knowledges. Of importance for this study is not any exact ordering, but that the listener should be able to hear and recognize these elements in the ongoing course of a piece of music. A kind of subconscious recognition of such elements may be sufficient for certain levels of musical experiencing, but is not at all adequate for teaching musical listening in the public schools. Conscious awareness does not detract from the listening experience, and will aid the experience even more as it becomes a habitual act, a mode of listening, rather than a consciously imposed process.

In the list below, the actual language is retained in order to avoid any misrepresentation. Items are not listed unless they occurred more than once. The reader may note a different emphasis depending upon the style of the music heard, but with a large core of common terms and emphases.

Renaissance:

imitation entrances
V-I cadence
Ionian cadence
tempo faster
deceptive progression
authentic cadence with plagal extension
sub meter, non support of 4/4 by harmonic change
chain of 4/3 suspensions
cadence on V
root movement in 3ds
prominent bass line
root movement in 5ths
ascending repeated melodic line
sequences
plagal cadence with tenor ornamentation
equality of voice writing
complete triadic harmony
sopranos enter imitatively
coda-like
overlapping phrases
polyphonic
embellished amen
flowing contrapuntal style
tempos
largo was pleasant because unexpected
rhythm unexpected
homophonic a nice change
rather unconvincing crescendo
entrance off beat
responses
codetta
suspensions
preparation for cadence
homophonic to contrapuntal texture
pattern of entrances
VI^6 chord
vague rhythms
4/3
modal
subjective interpretation of dynamics

resolution in soprano
fast moving parts in all voices
melismatic figuration
variety in movement
some cadences resolve to full harmony, others to octave and unison
motet
independence of voices
suspension resolution
fughetto
semi-cadence
chordal
voices enter at regular intervals
homophonic opening
antiphonal effect
concertante
swell and fade dynamics
tempo according to text
swinging and feeling
extended cadence
deceptive cadence
measured rhythm
increasing layers of texture
absence of metrical accents
masking of cadence by quick entrance
ornamental cadence
long phrases
smoothness of texture
imitation and free counterpoint
long pedal points
major thirds
no 3d in cadence
similar themes in all three sections
men vs women voice contrast
falling motiv
inverted pedal point
music lags in energy
literal word painting
frequent tempo changes
syncopated
entrances expected because of the melody not because of the bass
movement in lower parts
fauxbourdon
phrygian cadence
parallel thirds
imitation at 5th
imitation of alto
melodic contour of an arch
unusual chordal progression
harmonic change with countermelody in soprano and bass
3ds in soprano and alto
canonic treatment
formal structure
ornamental resolution
ornamental figure imitated
homophonic movement to an octave
4 part at cadences
development of phrases (line)

finality of cadences
interval of fifth very prominent
doesn't move to a strong point
stays in same key
new style-more vertical
composer illustrating words
tempi and points of emphasis dependent on words

Baroque:

bass gets dull
pulsating monotony of continuo
modulatory section
pedal tone
harpsichord
violin entrance
trill cadence
chord progressions
partial cadence
fugue
rhythmic feeling
polyphonic
change in tone colors
repetitive melodic aspect-bass line
predominance of a rhythmic motive
florid
entrance of new voices
question-answer, oboe, strings
cadence in relative minor
sequence up and down by steps
answer at 5th above
new theme
developmental section
relative minor key
interrelationship of voices
patterns introduced by each instrument
implied polyphony in single line
change in character
expressive use of ornaments
use of seconds
answering of instruments
extended cadence or cadenza
modulation
parallel thirds
entrance on IV
interesting bassoon melody
rising
proceding thru suspensions
ABA form
imitation in strings
inversion of first theme
driving mechanism
brilliant sonorities
answering voices
unison
rhythmic interest
harmonic movement
countermelody
begin waiting for end
countermelody on top
running bass line
violin lead, bass line interest
sequential
change of instrumentation
resolution of diminished chord
duet
pedal point
working out
timbre
trills
repetition of rhythmic figure
rhythmic drive
melodic independence
absence of subtle dynamic shadings
instrumental group of unlike qualities
triplets
episode, mostly sequential
modulating downward and a fugal prelude
bassoon notes
6 bar phrase
codetta
episodes
counter exposition
new figure
continuous holding
episode moving downward

Classical:

rondo
early Viennese classical style
Theme ABA
contrast of dynamics
simple accompaniment
concerto style
rhythmic accompaniment
8 bar period structure
4 bar phrases
rigidity of tempo
movement to passing cadence
rhythmic variations
chord pattern
parallel phrases
change from 1st time
Eb major
C minor
violins answer
reinforcement of rhythms
important contrasts
first appearance of winds
rhythm as theme
more color
various instruments
transitional material
winds contrast with strings
inversion
high point in melody
repetition is prominent
variation
parallel phrase
motivic development
statement in minor
fuller orchestra
symmetry, both formal and dynamic
driving rhythms
contrast between unison and chordal accompaniment
reprise
new key
off beat rhythm
development
syncopation
clever and quick ending, horn in 5ths
rondo with some variation of thematic material instead of literal repeat
oboe
loud, fast, exciting
instability of key
after beat in accompaniment
inversion
modulatory passage leading to restatement of theme
alternating bass and upper voices
crescendo
deviation of main motive
harmony
texture thickens
alteration with lower strings
rhythmic edge
cello answer
cadence
statement in bass
minor feeling
contrast in texture
strings answer
answer motifs
sequence
return of theme
interesting part
antiphony in parts
2d theme
change of color
change of line
running accompaniment
broadening of theme
tremolo
V^7 chord
sudden color
absence of rhythmic drive
return varied
travels even further afield
progression in quarters
mood change
development of melodic idea
register change
angular melody
nice counterpoint
intense
exchange imitation
codetta
surprising key treatment
varied melodic material on return
contrast strings and woodwinds
deviation material from basic idea
more development
ff-intense
very busy
woodwinds bring variety and underline movement

Romantic:

large orchestra
4 measure phrases
extension
imitation
variation
texture
sequence
melody in bass
oboe and clarinet
second theme
modulation
deceptive progression
V^9 chord to modulate
pedal point on V
accent on up beat
suggested modulations returning to C
tonic pedal
plagal cadence
change to sustained chords
rise in melody in off parts
cello-bass conrast
bass pedal
chromaticism
extended finale
contrast-steady rhythm
contrast-classical progressions
2d theme cello
same rhythm, new development
mixture of elements
persistence of rhythmic motive
accompaniment variation on rhythm
opening figure
sequence-melodic
accents give effect of syncopation
change of mood
homophonic structure
return of beginning run
almost chorale type
dynamic expressiveness
IV-I cadence
extension
sharp rhythm pattern
flowing, no precise rhythm
half note vs rapidly moving strings
return to 1st rhythm
transition
change of timbre
new half note figure
non-active harmony
drop of octave
end of exposition
modulation featuring theme
typical orchestration
triple figures
obbligato type sound
flute
1st theme
celli melody
strings 2d theme
scale passage
development
motif from introduction
repeat of theme
brass
coda
chord sequence
rhythm
syncopation
3 climaxes
accents
sequential instrumentation of rhythm
rubato
imitation between high and low
false bridge
more development
answer
countermelody
off beat accent
imitation of theme
build up
recapitulation
2 note slurs, low and high voices
minor
descending sequence
modulation to minor thru neopolitan chord
c minor
eb major
long pedal point; dominant up to II
theme over and over up a step
new thematic materials
theme 2 stretto and imitative
modulatory
superimposed meter, compound duple
contrast dynamically
contrast in mood
lessening of tension
contrast between beginning and intervening melodies
greater, more abrupt volume change
sweeping melodic line
emphasis on tonic chord
wide intervals

greater pitch range
new rhythm statement
development statement
new key
repeat initial idea

Impressionism:

repeated instrument
harp
thoughtful
agitated
peaceful
entire section sets anticipatory feeling
English Horn predominates
lush, string sound
changing colors, contrasts
oboe-harp
change of feeling
rest
change
decrease in emotion
increase in feeling
climax
change of mood
return of melody
somber
sectionalized music
key change-new theme
rhythmic conflict of flute against theme in violins
non-functional harmony
illustrative orchestration
contrary motion
chord thickens
anticipatory
isolated chords
entrance expected
dreadful piece of music-not sure representative

returning themes
flowing
pizzicato
woodwinds
all celli in melody
various instruments
building to meter change
glissando
instrumentation and mood outstanding
extension
interesting theme at the 5th
bass down a fourth
bridge
d minor tonality
repeat of beginning, end changed
major tonality
answering back and forth on theme
sounds modal
horns and trumpets, major and minor
up a ½ step, again higher, up again
down ½ step
sequence
2d ½ of measures
voicing
contrast of instruments, lush, sweeping
lyric, texture, color etc. in main
some rhythm comments
instrumentation outstanding

Contemporary:

themes
angular
atmosphere
imitation
addition of instruments
changes in orchestral color
solo with accompaniment
rhythmic motive
English horn and flute dialogue (in canon)
harp added
feeling of tonality

full texture
theme transposed
alternation of brasses
theme motives
polytonal chords in 4th and 5th
static harmony
impressionistic
addition of parts imitation
texture
juxtaposition of 2 themes and polytonality
augmentation of rhythmic motives

filigree over melody
vague Debussy style
extremes of pitch
contrast
polytonality
rhythm figure
extremes
colors
string drive
answering choirs
pastoral, ethereal
growth in intensity
theme repeated
idea repeated at other level
tension from discords
cymbals
harmonies
counter melodies-harp interest
theme with different accompaniment
sequential
bass prepares new theme
transition
answering between choirs
alternation of tonal regions
same theme throughout

minor 3d descending is predominant motion
dissonance for color and percussive effects
one important pitch
tension thru forward push
contrasting violins
contrast-stationery and forward
parallel open chords
varying degrees of dissonance
rhythm extremes
extreme range
stark harmonic sound
trumpet vibrato
canonic treatment
3 part feeling emphasized by texture
good illustration of key feeling in recent idiom
harmony and regulation of dissonance level
theme motivic
strings and trumpet in canon
rhythmic motif ties this together

Training is obvious in these answers. The respondents possessed a sense of pitch which enabled them to:

1. Discriminate up from down.
2. Discriminate skips from scale movement.
3. Discriminate chromatic passages.
4. Remember a melody, recognize it in whole and in part.
5. Distinguish the theme or themes from other material.
6. Recognize phrases and motifs.
7. Distinguish alterations of the theme, such as inversion, embellishment, contraction or expansion.
8. Recognize the "question and answer" type of melody.
9. Hear countermelodies.
10. Recognize and understand development passages.
11. Recognize instrumental timbre in normal tessitura and extremes of range.
12. Understand chord structure.

The respondents possessed an aural knowledge of harmony which enabled them to:

1. Recognize the tonal center, and the absence thereof.
2. Recognize modulations.
3. Recognize unusual intervallic combinations: parallel fifths, tritones, parallel first inversion chords, etc.
4. Recognize cadences, common and uncommon.

5. Recognize suspensions and resolutions.
6. Recognize modality, major and minor.

The respondent possessed a knowledge of instruments which enabled them to:

1. Determine instrumental color.
2. Recognize size and kind of performing ensemble.
3. Recognize thick and thin texture.

The respondents possessed a knowledge of musical style which enabled them to:

1. Determine contrapuntal, homophonic, canonic, imitative, sequential, and antiphonal treatment; recognize melismatic and ornamented styles.
2. Recognize the "normal" styles for any specific period and for major composers.
3. Distinguish between simple and complex music.
4. Distinguish between instrumental and vocal style.

The respondents possessed a knowledge of meter and rhythm which enabled them to:

1. Distinguish regular meter and recognize the downbeat.
2. Distinguish duple from triple meter.
3. Recognize and retain characteristic rhythms or rhythmic motivs.
4. Recognize irregular meter and nonmetrical movement.
5. Recognize deviations such as syncopation or hemiola.
6. Have a well-developed rhythmic memory.

One phase of the soliciting of expert opinion took the form of letters to major critics and writers concerning music. The letters asked them to state in their own words their agreement or disagreement with the ideas of Meyer, and to suggest the means by which they felt musical listening could best be taught in the public schools. Replies were received from the following individuals:

William Lichtenwanger
Alfred V. Frankenstein
Robert C. Marsh
Irving Kolodin
Lukas Foss
Winthrop Sargeant
Edward T. Cone
George Jellinek
Igor Kipnis
William Weichlien
Elizabeth Henderson
Robert Commanday
Edward Waters
Ben Parker
Edward Lowinsky
L. Ellinwood

Nathan Broder
Charles Gross
Martin Bernheimer
R. D. Darrell
Heather Sage
Irene Miller
Theodore Seder
Howard Taubman
Barbara Penyak

Each of the replies is given below, some of the more illuminating answers quoted almost in toto, and the less profitable ones abbreviated.

> "Children react most strongly to music of the later nineteenth century . . . . The first stage is emulation . . . . There is too much listening to music simply as background. . . . The second stage is that of music associated with non-music activities; the third stage is that of becoming aware musically, discriminating in self defense; the fourth stage is participation in music; the fifth stage is personal choice in formation of taste . . . . Most children's listening guides do more harm than good . . . . The piano does not force young players to listen to themselves--playing an instrument certainly plays a part in the process of learning to listen, where singing almost always leads to more emphasis on the words than on the music. The child will select music for reasons he knows not . . . . The final listening stage is where the listener listens as a student of the 'insides' of the music. Not everyone gets to this stage and it has bad effects as well as good ones. These are, in turn, all different to the 'pure' listening done only for enjoyment of the music.

> "I have no theories, hobbies, ideas or obsession about teaching on the elementary level."

> "A high school senior should be able to take a page of score, hum or sing the themes, and tell you with reasonable accuracy who wrote it and when. This is a real musical achievement he will never secure listening to records and reading the vapid stuff that usually passes as program notes. Appreciation of music is active, not passive, (Hindemith); it is putting a skill to work, not wallowing in sounds and pleasing the teacher with fancy verbalizations. The school must begin by allowing the child a chance to make music and listen to music that is related to the music he can produce himself. The task for the school is to build on the initial interests of the child, but seek to expand them, and continue building on those expanding interests with a dual emphasis on listening and playing, passive and active engagement with the music itself. The child must, as quickly as possible, see himself as a music-maker as well as a music consumer. If he cannot play a conventional instrument, give him an unconventional one, let him thump rhythmically on a dust bin, but get his body involved as well as his mind.

"The jolly stories are bad for several reasons. Children can be given biographical material, of course, but no effort should be made to portray the personality and the motivation of the composers until these matters can be conveyed and understood in adult terms. Secondly, the stories all too frequently become an end in themselves, the teaching aid becomes the subject matter. If the music is well chosen, it can appeal to the child's sense of imagination and discovery and hold his interest with a minimum of extra-musical support and no mythology whatsoever."

"I think it is a fundamental error to suppose that everyone is capable of what is called 'music appreciation.'

"It is my belief that every child should be exposed to musical stimuli to see if there is such a latent capacity or faculty; if not, why plague him with it? The implication that there is something ennobling about listening to music is hardly supported by the evidence that Mussolini played the violin and Hitler doted on Lohengrin and other Wagner operas.

"Should a range of tests show that he can recognize one sound as higher or lower than another, or identify it as the product of a particular instrument, then, I think he should be led on, through other exposure, to remembering melodic phrases, learning to sight sing, and perhaps--but only perhaps--play an instrument. I would stress exposure above all else . . . ."

"I know how ineffectual 'music appreciation' has been. How to arrive at a more effective substitute? Well, I really have only one idea, and it may not be a practical one for the public schools, but I'll state it, as it seems to me the only practical solution. Fifty years ago, although there was less music reaching fewer people in this country, there was, I think, a higher appreciation of music. It came because, among educated people, nearly every child learned, expertly or not, to play the piano, and four hand arrangements of symphonies were at least puzzled over, and sometimes played with pleasure. The amateurs who accomplished this were musically 'literate.' They knew things about the structure of music that today's passive phonographic listeners will never know, because music was for them a fascinating structural process that could be observed and checked on paper, as well as being listened to. Today he knows nothing about how it is put together. He is a musical illiterate with a machine, and even though he may go to countless concerts and operas, he remains ignorant of the wonderful technical proesses by which it is created. Now, my feeling--practical or not--is that everything that can be done to involve the student in the analysis of technique and in musical participation wherever possible, is worth all the 'music appreciation' ever devised. Teach elementary solfege--like the Paris conservatory system--based on immovable do so that modulations and relations between keys become apparent.

"Use a piano to puzzle out the formation of triads and seventh chords, key relationships and so on. Play excerpts from one line scores on the piano. I am sure that the discovery of a dominant seventh resolving to its tonic triad would come as a revelation to most present-day students.

"Rudiments of harmony should be part of the curriculum of the public school; write simple notation, master harmony, counterpoint, fugue, musical form, etc., if possible. All this refers to classic and romantic music: i.e. the music of the 18th and 19th centuries, which is the basis of our musical language. You will, of course, come across plenty of people (among them composers) who will advise you that music really began around 1911 with Schonberg and Stravinsky, and that training in the earlier craft is without value in the modern world. Techniques involved in contemporary music are far simpler than those used by the great composers of the past.

"I realize that what I propose involves thoroughly trained teachers. But that, I gather is your problem."

"I am not in favor of the 'hard sell' approach in any field. If children are exposed it should be gradual, considerate, and, above all, enjoyable. It should begin with popular and folk music. In the early stages it should involve as little 'Appreciation' as possible but use television, movies and cartoons."

"I am afraid I can contribute nothing useful. Although I took piano lessons from an early age, I did not begin to learn to listen until I was fifteen or sixteen."

"The real problem of teaching can ultimately be reduced to the problem of motivation. It is unfair to accuse music educators sui generis of failing in their jobs, for certainly their lack of success in music appreciation is no more critical than those who can't teach 'Johnny' to read. Now I realize it is quite out of the question to expect a child to be able to make the kind of distinctions that I have laboriously trained myself to make, but I think perhaps the first step in getting your fifth grader to hear is to get him to try to articulate what makes a piece by Mozart different from one by Mr. Lennon of the Beatles. I have the feeling that this stylistic approach may be the crux of the matter. The problem seems to be how one would find meaningful terms to communicate these distinctions to kids and terms for them to respond with. I think that the relative value of a Rock and Roll piece as opposed to a piece of 'serious' music MUST NOT be discussed. After all, the idea is to get the kids to hear, not become music critics. First stage is emulation because I can think of no valid reason why a fifth grader should 'appreciate' music that would make sense to him. Something like a Captain Kangaroo concert would be of tremendous value. The school should find a teacher who is admired, whose judgments the students will accept so they will think it must be good."

"The biggest problem in music education, as I see it, is the disparity of musical intelligence and sophistication brought by each student to the classroom. It is probably important, therefore, to teach fundamentals (scales, rhythm, etc.) early. It is good if one can associate a story or a situation with sounds. The average educator makes one fatal error: he talks about music too early and too much, and he plays music too late and too little. One should abandon chronology--start with the Romantics."

"They might learn to appreciate as they do the pop tunes with lots of exposure. The so-called regularly scheduled hours for music appreciation in the schools are neither sufficient in time nor psychologically ideal for the purpose."

"I am firmly convinced that this sort of approach of how the composer approaches the creative process is necessary and from there one proceeds to listening enjoyment through perception of form--form by no means only in the categorical Goetschius sense, but formal organization expressed in any one of a number of ways."

"Need inspired teachers--need to reform the educational system to encourage the participation of the truly talented musician."

"Constant exposure to music, the length of the listening period depending upon the ages of the children and the span of pleasurable attention."

"The ideal way is to grow up with it and teething on Victor Red Seal records. Excite curiosity by bringing an instrument to class. Use easy to follow music with stories. Check with symphony orchestra conductors who have school programs. Teach children to see good in any kind of music, but avoid like the plague the stories of the composers' lives. I see no reason for quizzes and tests which make it sound like work. Some will get it; some won't. Those who do, will have their reward."

"There is only one foundation for developing the art of how to listen to music, and that is the art of making music. The really·decisive education has to take place in the first to fourth grades. It is important that children sing. It is also important what and how they sing. Use folk songs, something like *Buch der Kindermusik*, published by Hansen, Copenhagen.

"One should get a man of infallible discrimination and long experience in the field to draw up a repertory of great folksongs. Students should make their own music."

"The beginning of all art is in creating art; the beginning of all intelligent participation and listening lies in the exercise of the art to be developed. From singing and accompanying with primitive instruments, go to playing instruments. Sing, play, transpose, accompany. Perhaps the work of Kodaly will furnish a clue. Once this is done, merely select music and play up the craftman's approach. The target should be to understand the language of music, its syntax, its grammar, its workings in its own terms. Children like a craftsman's approach--but again it needs good teachers to do it.

"Problems become questions of style, of form, of leading from the simple to the complex but the groundwork has been laid."

"Any suggestions I might make would be without foundation in practical experience."

"Actual playing is the only true beginning for musical listening. This conviction has been strengthened by my observation of Suzuki. For the actual music involved in a program such as suggested, I believe that a simple variation form, rounds or canons have sufficient form and identity as to be readily distinguishable by even an untrained ear."

"Music is the spice of life and not the main course. It can be over-emphasized in the public school curriculum. It should be introduced easily through singing, playing, and dancing. Musical training and appreciation are in order only for the musically exceptional child."

"Music requires attention and concentration and esthetic perception which is beyond the scope of this age level. Memorize short selections of the classic repertoire. Avoid audio visual aids. They are a boon to the lazy or unprepared teacher."

These replies show disagreement, but when the positive responses are analyzed, they fall into two groups representing two points of view. One point of view is to teach music with the primary objective of building a favorable attitude, making it pleasant, for the average pupil; the thorough training would be reserved for those pupils with talent. The other point of view is to teach listening to all with a fairly rigorous and structured approach, emphasizing skills and knowledges even for the average pupil. In expounding his theory of meaning, Meyer both implies and states overtly that skills and knowledges are necessary for a real musical experience. He has not given any consideration as to how these are to be developed in the listener; one therefore cannot conclude which if either of these viewpoints would reflect Meyer's own. Presumably all experts would agree that the more good music heard by the pupil, the easier or less rigorous the formal training would need to be.

An additional step in determining requisite knowledges and skills was to analyze the thirteen books on musical listening which were felt to offer valuable insights. These books are listed on page 33 of this chapter. None of these books differentiated between musical elements, knowledges and skills; in the list that follows, some attempt has been made to organize these items into the broad categories of melody, rhythm, harmony, form and style, but many of the items overlap into more than one of the categories. There was nearly complete agreement among the books, their differences being those of emphasis, thoroughness of treatment, and occasionally differences of terminology. The list below contains duplications where these reflect a slightly different emphasis or different manner of expression. In these cases the reader may make his own interpretation rather than depending upon the interpretation of the investigator.

Melody

- imitation
- give and take
- principal melody but also important bass
- limited or wide range of sound
- action of component voices
- effect of voices on phrase structure and casesuras
- varieties of texture used
- effect of tone color on texture
- dynamics
- perfect 5th
- tritone and cadence
- effects
- scale
- major triad-chord outlines
- subsidiary tones
- what taking place now?
- what will happen next?
- relate to what has gone before
- motive
  - repetition
  - variation
  - contrast
- melody
  - contrasting
  - repetition
- answering phrase comparable length for symmetry
- answering phrase of different length
- phrase and recurrence
- adding well defined phrases
- spinning movement continuously
- following score
- pitch
- quality
- loudness
- duration
- step-skip
- chromatics
- tetrachord
- movement
- memory
- regular, expected recurrence
- how up and down expresses
- normative law
- tone
- length and range
- register and contrast
- progression
- direction
- function of melody-theme
- intensity

Rhythm

- meter
- accent
- change in tempo
- syncopation
- rhythmic motives
- ebb and flow of rhythmic motives
- clarity and strength of caseuras
- quality of beat or pulse with respect to regularity, strength and clarity
- approximate tempo
- approximate metric groupings
- correlation of beat
- tempo and meter
- salient rhythmic motives
- sense of rhythmic progression within phrase
- rhythmic structure of phrases
- rhythmic variety
- time elements
- move forward in time
- pace, regularity, articulation
- measured rhythm
- rhythm generates movement, gives characteristic manner to musical movement, controls movement, marking off units of musical time
- beat is a link by which groups are joined
- basis of musical structure
- rhythmic features
- repeated rhythmic phrases
- related rhythmic figures
- rhythm relative to meter

Melody (cont.)

volume
unity-unifying features
contrast and reconciliation of divergent and often opposing musical qualities
color
period
shape-curves
sequence
contour and effect of movement
distribution of salient motives (related)
important resting tones
points of rest
high point
tessitura
large phrase groups
subdivisions in phrase embellishments
new tonal level
compositional devices
nonharmonic tones
soprano-bass comparison
connecting materials

Harmony

1 part playing
one principal part featured
one procedure governing texture
homophonic
polyphonic (counter point) and contrapuntal
blending of voices-homogeneity of sound or sharp contrasts
tonal center and strength of
effects of stability and unstability
prominence of given tone
plagal, deceptive, half, authentic
mode
type of chord used
kinds of cadence and relative strength
fit observations regarding harmony into expressive picture of the piece
minor chord
diminished chord
consonant
dissonance
tension
contrasting key
return to home key
understand as movement of chords

Style

legato and detache
staccato
relation of items under rhythm to style and expressive qualities of piece
text
dynamics
style
balance
orientalism
single mood
mediums of vocal and instrumental interpretation
emphasis, clarity and effect of point of arrival
interpretation is tonal and unit corrections, tempo, dynamic level, tone duration, tone quality
historical considerations
mood
highlighting words
special dramatic chords
texture
idiomatic writing

Harmony (cont.)

harmonic rhythm
simple-complex
cadences
quality of root of chord
harmonic function
modulation
inversions
tension-relaxation
accompaniment

Form

2 part
3 part
in relation to piece as a whole
in relation to separate shorter
  parts of a piece
simple sectional
variation
large section
free forms
5 organizing principles:
  repetition
  contrast
  symmetry
  variation
  development
type of composition

Ratner's excellent analysis of musical elements is organized according to stylistic period. It is duplicated here exactly as it is given in his book, in order to illustrate how the educated ear must listen for different elements and items in different types of music.

	Medieval	Renaissance	Baroque
Qualities of Sound	thin, light sound; medium register; variety of vocal and instrumental color	richer, fuller sound; medium registers with greater importance of bass level; moderate strength	wide variety of instrumental and vocal sonorities; contrasts between full and thin; greater range in registers; often great strength and amount of sound

	Medieval	Renaissance	Baroque
Texture	1 to 4 parts, relatively equal; polyphonic action	3 to 6 or more parts; some chordal texture; principal texture remains polyphonic; fuller sound tends to disguise polyphony	polarity between soprano and bass; middle voices add fullness; some chordal texture; principally polyphonic action
Consonance	4ths, 5ths, 8ves, unisons; consonance represents stability and arrival; open intervals	3rds, 6ths, 5ths 8ves, unisons; 4th treated as dissonance at times; high concentration of consonance; triad sounds	3rds, 6ths, 5ths, 8ves, unisons; 4th partial dissonance; consonance equals stability
Dissonance	2nds, 7ths used ornamentally, with frequent clashes between lines; in earliest polyphony, 3rds, 6ths treated as dissonant	preparation and resolution of dissonances; elimination of clashes	increase in amount and intensity of dissonance; many "tritone" dissonance
Harmonic Action	incidental cadences; few leading tones; light sense of harmonic progression	appearance of strong cadences at phrase endings; more leading tones; beginning of key sense; increase in feeling of harmonic drive	much stronger and more pervasive cadential action; full emergence of key sense; active, compact harmonic flow with strong feeling of drive
Movement	steady, moderate, gentle pace; some variation in manner of movement; mild accentuation by length	steady, moderate pace; considerable different styles; growing vigor of movement in secular and instrumental music; gentle accentuation	in early baroque, sharp contrasts of pace, often with uncertain flow; in late baroque, vigorous, steady, "motoric" pace throughout a piece; wide range of pace and manner present; growing vigor of accent

	Medieval	Renaissance	Baroque
Arrival	gentle, clear points of arrival; some leading tone action in polyphony; open and closed cadences in dances	gentle points of arrival; stronger cadences occasionally and at end of piece; well-defined caesuras and cadences in dance music	relatively few but strong cadential points
Phrase Structure	relatively short phrases; symmetry in dance music	relatively short phrases in dance music; in polyphonic music, continuous flow, covering cadences, extending asymmetrical phrase structure	in dance music, symmetrical phrase structure; relatively short phases of movement; in other music continuous expansion, building broad phrases

	Classic	Romantic	Modern
Qualities of Sound	wide variety of instrumental and vocal sonorities; brilliant sound, transparent; much contrast between light and full; wide dynamic range; exploration of higher registers	increase in fullness, richness, and denseness of sound; concern with special color effects; striking contrasts; widened range of pitch and dynamics	extremes of transparency and density; experiments in new sonority effects; sharp contrasts of color; tendency to reduce the "sweetness" of sound
Texture	2, 3 to many parts; emphasis on principal melody, with some polyphony, some give-and-take	tendency toward amplification of lines by doublings; active part-writing, often with rich ornamentation; 3, 4 to many parts	1, 2 to many parts; prominent polyphonic action, also give-and-take; also use of baroque, classic, romantic textural layouts

	Classic	Romantic	Modern
Consonance	same consonance values as preceding eras	same consonance values as before; lesser proportion of consonance than previously	consonance no longer a synonym for stability, although traditional ideas of consonance and dissonance still have considerable force
Dissonance	dissonance used for harmonic tension, for dramatic emphasis, often without preparation; many "tritone" dissonances	greater saturation of dissonance, often without intervening consonance; dissonances make rich sounds, and represent instability; tritone, 7ths, 9ths, altered intervals	as a rule, considerable saturation of dissonance, with dissonance frequently at points of arrival; functional distinction between consonance and dissonance disappears frequently
Harmonic Action	saturation of cadential action; long-range definition, long-range contrast of key; very strong harmonic drive	retention of classic cadence feeling with tendency toward deceptive and elided resolutions; rapid elusive shifts of tonal center; harmonic color an objective; weakened harmonic drives	partial abandonment of older chord types; substitutes for older cadences; rapid shifts of tonal areas; modal, atonal, polytonal, tone-row, microtonal systems; little harmonic drive
Movement	wide range of pace and manner; strongly influenced by typical song and dance manners; steady, action pace, with strong accentuation	wide range of pace and manner; appearance of imbalanced, unsteady qualities of movement; preference for slower pace, less vigorous accent	emphasis on active, percussively accented pace, with cross-rhythms and imbalances, often in rapidly paced music; wide range of pace and manner; uncertain, shifting pace often found

	Classic	Romantic	Modern
Arrival	clear, frequent, strong points of arrival; momentum often carries beyond, aiming for emphatic cadential points	obscured cadences, disguised points of arrival more frequent	in neo-classic and folkloric music well-defined points of arrival; in expressionistic music, uncertain sense of arrival
Phrase Structure	well-defined period structure in all forms and types; extension of periods	in small pieces, clear periodization in symmetrical structure; in larger works, tendency toward asymmetrical phrase structure	as a rule, asymmetrical phrase structure; some use of baroque continuous expansion and classic periodization

In order to verify the findings derived from the sources thus far consulted, a basic concept of musical meaning was stated, a restatement made of the basic categories of musical elements, and then further documentation of the musical elements was provided from sources outside the immediate realm of music appreciation. These sources included theory and composition, musicology, esthetics, history, orchestration--the entire field of musical writing is represented in the sources used. The basic concept of musical meaning was stated as follows: musical meaning lies in the opposition of motion and rest (tension and resolution) in music, the static versus the progressive. The degree and proportion of each is quality-determinant. The method of achieving motion and rest is through repetition and/or variation of musical elements. The basic categories of musical elements are these: (1) melody, (2) rhythm, (3) harmony, (4) form (structure), (5) orchestration (tone color).

Scrutiny of the categories into which "elements" from the music listening texts had been placed led to the conclusion that "style" is not an element, but is rather a creation of the musical elements. Instrumental color, though little emphasized in the texts, is an inherent factor in the music, helping to determine the qualities of motion and rest; it was therefore included as one of the basic elements in spite of its neglect in the texts consulted.

MUSICAL ELEMENTS

GENERAL METHODS OF ACHIEVEMENT:

Repetition and/or variation of musical elements.

ELEMENTS: basic categories

1) melody
2) rhythm
3) harmony

4) form (structure)
5) orchestration (tone color)

Documentation: basic categories

1) *melody*
   - a) Lourie, A. "An Inquiry into Melody," *Modern Music*, volume VI.
   - b) Fox-Strangeways, A. H. "Tune," *Music and Letters*, vol. III, # 1.
   - c) Watt, H. J. "Melody," *Music and Letters*, vol. V, # 3.
   - d) Bie, O. "Melody," *Musical Quarterly*, vol. II.
   - e) Apel, W. "Melody," *Harvard Dictionary of Music* (Cambridge, Mass: Harvard U. Press, 1964), p. 435.

2) *rhythm*
   - a) Sachs, Curt. *Rhythm and Tempo*, New York: Norton, 1953.
   - b) Cooper, G., and Meyer, Leonard. *The Rhythmic Structure of Music* (Chicago: The U. of Chicago Press, 1963).
   - c) Riemann, H. *Katechismus der Musik Asthitik*, Leipzig, M. Hesse, 1903. (notable for idea of perfection in quadruple [advisable] meter, and discussion of agogic accent.
   - d) Lowinsky, Edward. "On Mozart's Rhythm," *Musical Quarterly*, 1956, vol. XLII, # 2.

3) *harmony*
   - a) Piston, W. *Harmony* (New York: W. W. Norton and Co., Inc., 1948). Standard textbook.
   - b) Apel, W. "Harmony," *Harvard Dictionary of Music* (Cambridge, Mass.: Harvard U. Press, 1964) p. 322 +.
   - c) Schonberg, A. "Problems of Harmony," *Modern Music*, vol. XI, # 4.

4) *form* (structure)
   - a) Tovey, Sir D. *The Forms of Music* (New York: Meridian Books, 1964).
   - b) Abraham, G. *A Hundred Years of Music*, 2nd ed. (London, 1949). Study of style and forms of music--Romantic and Modern.
   - c) Bukofzer, M. *Music in the Baroque Era* (New York: W. W. Norton and Co., Inc., 1947). See Chapter 10 on "Form in Baroque Music," p. 350 +.
   - d) Riemann, H. *Grundriss der Musikwissenschaft*, Leipzig: Quelle and Meyer, 1914.
   - e) Sulzer, F. *Structural Hearing*, Vol. II (New York: Charles Boni, 1952).
   - f) Tovey, D. F. Articles "Contrapuntal Forms," and "Sonata Forms," in *Encyclopedia Britannica*.
   - g) Dent, E. J. "Binany and Ternary Forms," *Music and Letters*, vol. XVII.

5) orchestration

  a) Kennan, K. The Technique of Orchestration (Englewood Cliffs, N. J., Prentice-Hall, Inc., 1952). Standard text.
  b) Carse, A. The Orchestra in the XVIIIth Century (Cambridge: Oxford Press, 1940).
  c) Carse, A. The Orchestra from Beethoven to Berlioz (New York: Broude Brothers, 1949).

Breakdown of Basic Categories:

1) Melody

  a) melody as motion: pitch quality: be able to distinguish between high and low.
  b) melody as a time quality: be able to distinguish between long and short.
  c) conjunction with rhythm.
  d) texture - how treble-bass range is filled: need recognition of voicing, especially outer voices
    1. appearance of melody with no additional element of texture (monophonic music)
    2. combination of melody with one or more other melodies (polyphonic music) [counter-point]
    3. appearance of melody supported by harmony (homophonic music.
    4. suggestions of polyphony by simple melody.
  e) phrasing
    1. periodic or additive (balanced or uneven) - ability to determine measure length and what a measure is.
    2. short or long phrases.
    3. use of sequences - retention of short melodic fragment; recognition of repetition on different pitch level.
    4. emphasis or de-emphasis of bar line.
  f) tonality of melodic line
    1. does it establish key feeling by diatonic, triadic revolution? Need to know what a triad is--essentials of tonal harmony, establishment of key by cadence to tonic.
    2. or is it chromatic? Need to know about weakening of diatonic harmony by insertion of sharps and flats--basic knowledge of relation of raised and lowered pitches to diatonic scale.
  g) dynamics
    1. contrasting
      a. patterned (sequential)
      b. free
    2. role in emphasizing specific melodic tones
  h) repetition
    1. identical
    2. sequential
    3. reiteration of small motifs
    4. remain within same key or triad

- i. *variation*
    - 1. change in registration
    - 2. ornamentation
    - 3. change in melodic direction
    - 4. modulation to different key

2) *Rhythm* (basic skills required)

- a) knowledge of *meter* and types (divisive, additive)
- b) recognition of *strong and weak beats*, upbeat and downbeat
- c) recognition of *repetition*, particularly of sequential repetition as a form of musical organization
- d) knowledge of three fundamental types of accent:
    - 1. *dynamic accent* - produced by stress: soft or loud notes receive accent
    - 2. *agogic accent* - produced by duration length of notes determine accent and, therefore, relative importance in phrase
    - 3. *tonic accent* - produced by melodic change--low or high notes receive accent. Importance, particularly, of large leaps.
- e) recognition of additional type of accent--achieved by either reiteration of same note, so that it predominate the phrase, or by any combination of dynamic, agogic, tonic accents.

Principal source: Sachs: *Rhythm and Tempo* (New York: Norton, 1953).

Eminent Aestheticians:

Barzun, J. *Classic, Romantic, and Modern*. Rev. ed. (Anchor P. B., 1961).

Leichtentritt, Hugo. *Music, History, and Ideas* (Harvard, N. J., 1947).

Mellers, W. *Music in Society* (Norton Series, 1950). Uneven.

Reese, G. *Music in Art, Culture, and History* (Free Press of Glencoe, 1964).

Rodman, S. *The Insiders: Rejection and Rediscovery of Man in the Arts of Our Time*.

Calvocoressi. *Musical Taste and How to Form It* (Oxford, 1925).

Kolodin, J. *The Critical Composer* (New York: Howell-Sosken, 1940).

Kolodin, J. *The Composer as Listener* (New York: Horizon Press, 1958).

French, Richard F., ed. *Music and Criticism--A Symposium* (Harvard Univ. 1947). Collection of essays on current vital topics by composers and critics.

Ferguson, Don. A History of Musical Thought (New York: Appleton-Century-Crafts, 1948). Elementary survey.

Sachs, C. Commonwealth of Nations (New York: Norton, 1946). Interrelationship of music and other arts.

Lang, P. H. Music in Western Civilization (New York: Norton, 1941). Relation of music to social and political condition of times--to philosophy, history, literature, and other arts.

Westrup, J. An Introduction to Musical History (New York, 1965, London: Hutchinson Music Library, 1955) P.B. See especially Ch. IV on social background; VI on patronage; VII The Musician and His Environment; VIII the Influence of Taste.

3) Harmony

- a) Tonality (revolution around a tonic)
  1. simple I-V relationships (strong)
  2. diatonic - use of major or minor scale, with little use of accidentals
  3. chromatic - tendency to de-emphasize tonal center by use of non-harmonic tones, accidentals (weak)
  4. use of loud inversions, diminished chords, pivot chords suggesting foreign keys
  5. modulation
     - a. by cadence into new key
     - b. by enharmonicism - reinterpretation of a tone or chord
- b) Tempo
  1. speed of piece determines quantity of harmonic changes
     - a. little change in fast movement - maintainence of same harmony over several measures
     - b. greater change in slow movement - changes from measure to measure; often within the measure
- c) Consonance - Dissonance
  1. role played in determining degree of stability of work, or of variation (motion)
  2. need fundamental knowledge of what intervals were considered resolved /consonant/ or motion inductive /dissonant/ during common practice period (18th century)
  3. need knowledge of acceptable dissonance-consonance resolutions during 18th century. Can measure non-standard resolutions against this, and also compare with standards used by other periods
- d) Texture (need basic understanding of terms homophonic and polyphonic)
  1. homophonic - harmony understood vettically in terms of chords, supporting a melody
  2. polyphonic - harmony subsidiary to moving lines. Still need basic knowledge of vertical sonorities.
  3. alternating homophony-polyphony - degree of variation, and of formality of format in alternation quality-determinant.

- e) *Phrasing*
  - 1. need basic understanding of flux between points of rest (cadences, or breath marks) and through-motion
  - 2. important to recognize whether composer uses balanced or uneven phrasing as mode of musical organization
  - 3. need knowledge that a phrase is made up of a combination of measures --that it exists in time
- f) Sum of Basic Requirements to be proficient in harmonic listening (Source--Piston: *Harmony* (New York: W. W. Norton and Co., Inc., 1948).
  - 1. *knowledge of fundamentals* - scales, intervals, triads (in all positions) - doublings, spacings
  - 2. *knowledge of usual progressions* and voice leadings.
  - 3. *knowledge of various systems of organized relationships by tones* - by key (tonality), by scale (modality). Also more recent systems such as the Schoenberg 12 tone system, based on tonal equality, rather than tonal relationships.
  - 4. *knowledge of phrasing* -
    - a. distribution of harmonic change within the phrases
    - b. types of cadential endings
  - 5. *knowledge of harmonization of a melody*
  - 6. *recognition of modulation*
  - 7. *knowledge of non-harmonic tones*, recognition of occurrence, quantity determining degree of tension achieved
  - 8. *knowledge of more complex chords* - dominant seventh, secondary dominants, diminished seventh, ninth chords (incomplete and dominant), eleventh, thirteenth chords, Neopolitan sixth, altered chords, augmented sixth chords, chromatic chords
  - 9. *recognition of sequence*
  - 10. ability to hear and realize *figured bass*

3) *Form* (structure)

- a) *understanding of the term "form"* as organized relationships of sounds, arranged in orderly manner
- b) *understanding of all basic components of the term "form"*: tones, intervals, scales, tonality, consonance-dissonance, meter, rhythm, phrases, theme, motive, repetition, variation, modification, transposition, modulation, sequence, inversion, devices of counterpoint
- c) *understanding of the term "musical forms"* - as a plan of construction--the general principles and schemes which determine the structure of a work
- d) *knowledge of basic forms*
  - 1. *Single forms*
    - a. *Repetition forms*
      - 1. variation form (a a' a")
      - 2. binary form (ab ||:a:|| ||:b:||)
      - 3. rounded binary form (||:a:|| ||:ba:||)
      - 4. sonata form (||:a:|| ba)
      - 5. ternary form (aba)
      - 6. rondo (five-part) form (abaca)

        7. rondeau(abacad...a)
        8. rondo-sonata form (abacaba)
        9. medieval forms: ballad, roudeau, virelai [ballata]
    b. continuation forms
        1. cantus-firmus forms: organum, 13th century motet; chorale compositions
        2. imitative forms: 16th century motet; ricercars; fugue

4) Compound Forms (consist of various "movements")

    a) instrumental: sonata; concerto; suite; toccata
    b) vocal: contata; mass; passion; oratorio; opera

Documentation: on 20th century music

1) Slonimsky, Nicholas. Music Since 1900 (New York, 1949).
2) Mellers, Welfred. Studies in Contemporary Music (London, 1947)
3) Forte, Allen. Contemporary Tone Structures (New York, 1955).
4) Perle, George. Serial Composition and Atonality (Berkeley and Los Angeles, 1963).

Other:

1) Grout, D. J. A History of Western Music (New York, 1960). passim
2) Tovey: On sonata principle [form]--tonal development, rather than thematic
3) Ratner, Leonard. Journal American Musicological Society. Article on sonata-allegro form [set tonal area, depart, return = ternary].
4) Leti. Thematic Process in Music (New York: McMillan, 1951).
5) Apel, W. Harvard Dictionary of Music (Cambridge, Mass, 1944). Articles "Form" and "Forms, Musical," pp. 277-279.

5) Orchestration

    a) understanding of pre-19th century role as finishing touch to composition by addition of instrumental tone color
    b) changing function of orchestra in 19th and 20th centuries to provide variety and contrast in works conceived for orchestra, rather than for piano or voice
    c) knowledge of instruments: types, families, sound, range, techniques, special effects, scoring, transposition, use by composers of the past, expressivity, dynamic variations, history, use as textural means, knowledge of score reading and conducting, plus proficiency on at least one orchestral instrument

Documentation:

Dart, Thurston. The Interpretation of Music (London: Hutchinson's Music Library, 1954).

Eminent Aestheticians:

Einstein, C. Greatness in Music: An Attempt to Establish Categories of Value (New York: Oxford, 1941).

Hauser, A. The Social History of Art, 4th vol. P.B. (New York: Knopf, 1951). Indispensable background.

Weber, Max. Rational and Social Foundation of Music (Carbondale, Ill.: Southern Illinois University Press, 1958). Relation of music to environment and to history of ideas. Association of music with states of mind, conditioned by external factors. Sociology, economics politics, development makes certain approaches to music necessary.

The music listening books discussed earlier and the references just cited in documenting the knowledges and skills, all are characterized by the lack of a well-developed theory of musical meaning or musical aesthetics. At the present time, Meyer's Emotion and Meaning in Music provides the most thorough, explicit and cogent theory available as a basis for music instruction. Therefore, some abstract of the ideas from Meyer's writing was necessary to provide guidelines for the study and to convey to the cooperating teachers a general picture of the purposes and nature of the experiment. Such an abstract runs the risk of misinterpretation but furnishes the only easy introduction to Meyer's ideas.

Following is a list of statements derived directly from the text of Emotion and Meaning in Music, given in the order in which they appear in the text. These statements are not necessarily topical, and the list is not meant to form an outline of the book's contents. The statements include both those which form the subjects for important discussions and those which indicate Meyer's views on certain aspects of teaching, learning, or listening.

Teachers' Orientation to Emotion and Meaning in Music, Leonard B. Meyer

"Musical meanings depend upon learning." 2

Criticizes absolute expression theory, the separable, discrete sound people and the theory that responses are natural or universal. . . . grouping stimuli into patterns 6

Listeners generally unable to pinpoint the particular musical process which evoked the affective response. 7

"Affective experience includes an awareness and knowledge of the stimulus situation." 23

"Tendencies do not simply cease to exist, they are resolved, they conclude." 23

"Emotion or affect is aroused when a tendency to respond is arrested or inhibited." "The tendency to respond may be either conscious or unconscious. . . . Such conscious and self-conscious tendencies are often thought of and referred to as 'expectations'." 25

"Every inhibition or delay creates uncertainty or suspense." 27

Ignorance may give rise to sanguine feelings or a desire for clarification which is unfulfilled-throws individual into doubt and uncertainty. 27

"Greater the buildup the greater the release." 28

"Unexpected always a possibility, not a complete surprise." 29

"If no mental synthesis takes place
1. mind may suspend judgment
2. mind may reject whole stimulus and irritation set in
3. unexpected consequent may be seen as a purposeful blunder." 29

"Expectation involves a high order of mental activity." 30

"Mental activity need not be conscious, if not the response will probably remain unconscious." 30-1

"If intellectual activity remains unconscious--tension and deliberation is experienced as feeling or affect rather than as conscious cognition." 31

"Embodied musical meaning is, in short, a product of expectation. If on the basis of past experience, a present stimulus leads us to expect a more or less definite consequent musical event, then that stimulus has meaning." 35

"Past experience and remote past experience are important." 36

"The operation of intelligence in listening to music need never become self-conscious." 38

"Understanding is a matter of habits acquired." 39

"Same processes give rise to affect as give rise to embodied meaning." 39

"Affective experience is just as dependent upon intelligent cognition as conscious intellection--both involve perception. Thinking and feeling are different manifestations of a single psychological process." 39

Music that does not arouse expectations is meaningless . . . and therefore music in a style with which we are totally unfamiliar is meaningless. This state of total unfamiliarity is, obviously, very rare with most music we hear.

"Past experience" refers to what has gone on before in the music; to the experiences the listener brings with him to the music and to "the laws of mental behavior which govern his organization of stimuli into patterns and the expectations aroused on the basis of those patterns."

"Consequent musical event" refers to three stages of meaning:
1. hypothetical meanings - are those that we imagine are going to occur.
2. evident meanings - are those which actually do occur. Since each event is preceded and followed by another, there arises a chain of stimuli and responses which fluctuate between the two kinds of meaning. For instance, on hearing a chord we assume it will lead to another sound which we expect. It may lead to an unexpected chord, just as easily. In any event we are able to perceive the relation between an antecedent and its consequent only after it has occurred.
3. Determinate meaning - refers to the relationships existing after all of the events and relationships have occurred and are as fully understood as possible.

Meaning and affect are part of the same psychological process.
. . . . "while the trained musician consciously waits for the expected resolution of a dominant seventh chord the untrained, but practiced, listener feels the delay as affect." 40

"A sound or group of sounds that indicate, imply, or lead the listener to expect a more or less probable consequent event are a musical gesture or 'sound term' within a particular style system." 45

Often the hypothetical meaning of a sound term is very different from its evident meaning. We expect one thing, but after hearing it, get another. "We are constantly altering our expectations." 48

"Deviations will be most effective where the pattern is most complete." 50

"Ambiguity arises either because the progressions involved in a passage are so consistently irregular and unexpected that the listener begins to doubt the relevance and efficacy of his own expectations or because the shapes of the sound terms are so weak and uniform that there is only a minimal basis for expectation." 51

Re. Schenker - "Too much emphasis upon the highest architectonic level not only tends to minimize the importance of meanings as they arise and evolve on other architectonic levels but it also leads to a static interpretation of the musical process." 52

"While we are experiencing music, we hear modulations and changes of key; we experience shifts in tonal center." 53

"We have stated that styles in music are basically complex systems of probability relationships in which the meaning of any term or series of terms depends upon its relationships with all other terms possible within the style system." 54

Style follows the laws of probability and here he quotes Frances Densmore's work. 55

". . . in a sense, each particular piece is also a particular style system." 56

The best way to develop sense of style--"This can be achieved only through practice in listening and better still in performance." 56

"Like the perception of and response to the more generally continuous aspects of style, the understanding of form is learned, not innate." We hear many works of a class and then generalize about a form. 56

"The development of all stylistic response sequences involves abstraction." 57

"It is important to know, in a general way, what the style of music is so that the responses brought into play will be relevant--it is also important to know what formal procedures are being employed. For our opinions as to form modify and condition our expectations." 58

"One brings different expectations to a Schubert impromptu than to a sonata movement." 58

"The experienced listener will, for example, bring a very different set of habit responses into play if he is about to hear a sonata movement by Stravinsky from those which will be activated if he is about to hear a sonata by Schubert." 59

Information about a style affects what we look for and "the speed of our perceptions and our responses." 59

"Form is always specified with reference to style, just as style should be particularized with reference to form." 59

"Having heard a Schubert sonata does play a part in perception of one by Stravinsky." 59.

"The response to music as well as its perception depend upon learned habit responses." 60

"Styles constructed by musicians depend upon a particular time and place and are not based upon universal, natural relationships inherent in the tonal material itself." 60

"The experience of music must be based on responses acquired through learning." 61

"Understanding music is not a matter of dictionary definitions, of knowing this, that, or the other rule of musical syntax and grammar, rather it is a matter of habits correctly acquired in one's self and properly presumed in the particular work." 61

"Objective knowledge and conceptual understanding do not provide the automatic, instinctive perceptions and responses to ensure understanding." 61

"Habits are important." 61

"Expectation must have status of an instinctive mental and motor response." 61

"Early instruction is important." 62

"Motor learning plays a role early in instruction." 62

"A deviation may become normative after a period of time." 65

Style changes come about in part from cultural change. More important, each style destroys itself by deviation. "This means that once a style is established there is a constant tendency toward the addition of new deviants, and toward pointing up, through emphasis or exaggeration, those deviants already present. In short the nature of aesthetic communication tends to make for the eventual destruction of any given style." 65

Traditional, Academic, and Decadent Art: "The traditional artist is one who understands the relationship of norms to deviants and who works within this relationship. . . . The academic artist, extolling what he thinks to be tradition, views norms as ends in themselves. He codifies not only the norms but also the deviations, giving these the status of norms. Failing to understand the necessity for flexibility in deviation, his art becomes fixed and sterile. Decadent art, in contrast is art . . . where deviations are so to speak, pursued for their own sake." 71

"The patterns of style are fixed by neither God nor nature but are made, modified and discarded by musicians. What remains constant is the nature of human responses and the principles of pattern perceptions." 73

Preparatory Set p. 73

1. Listeners belief about aesthetic experience
2. Experience and knowledge previously acquired in listening and studying about music.
3. Information gathered on the particular occasion in question.

"Nothing in art happens without a reason." 75

"One must come to the listening experience with a preparatory set . . . be ready to listen, believing that the experience is to be a significant event. We believe that real accident is foreign to good art." 75

"The relationships set forth in the art work are significant." 76

"The story of a composer doesn't do anything to help appreciation directly but aids appreciation by strengthening belief and creating a willing attitude." 76

"Dispositions may be acquired either systematically or by chance." 77

"Knowledge crucial, if we know that a particular movement is theme and variations we are intent on following the theme." 78

Our learned habits influence our perception. "Where the center of our interest lies, there, ceteris paribus, a figure is likely to arise." 78

"An expected stimulus will be perceived and understood more rapidly than would otherwise be the case." 79

Anticipatory motor attitudes form part of the preparatory set on the basis of information as to composer, style, or form which leads the listener to expect a repetition of past motor experiences, program notes as to tempo, volume, mode, mood and so forth and visual clues. 79

Meyer quotes Mursell that ultimate foundation of rhythm is to be found in mental activity. Quotes Sachs and Brelet that rhythm comes from the mind not the body. 81 Concludes that Everything which occurs as a motor response can be accounted for in terms of mental activity and, since the converse of this is not true, music is best examined in terms of mental behavior. 82

"The mind is the organizer." 83

"Though, as we shall see, the mind organizes and groups the stimuli it perceives into the simplest possible shapes or the most satisfactory tnd complete figures possible, what is, in fact, the most satisfactory organization in any given case is a product of cultural experience." 85

". . . any generalized Gestalt account of musical perception is out of the question. Each style system and style will form figures in a different way." 85

. . . "The number, interdependence, and subtlety of the variables involved in musical perception make the establishment of a system of analytical rules of thumb impossible." 86

"The fundamental axiom of Gestalt theory is the law of Pragnanz, which states that 'psychological organization will always be as 'good' as the prevailing conditions allow.'" 86

"For the mind is constantly striving toward completeness and stability of shapes." 87

"The better the psychological organization, the less likely is it that expectation will be aroused." 87

"Without thought and memory there could be no musical experience." 87

"If expectation results from, say, a definite structural gap, the delay in completion of the thought process will result in affect unless the process is rationalized on the conscious level." 88

"The law of Pragnanz functions within the memory process, which tends to complete what was incomplete, to regularize what was irregular, and so forth. Moreover those shapes which are not well figured and which the memory is unable to 'straighten out,' complete or make symmetrical will tend to be forgotten." 89

"There is a great difference between recognition and recall." 90

"Traces left by memory are constantly changing, normalizing, emphasizing, or pointing, autonomous changes. Rehearing is a new hearing, yielding new insights." 90

Continuation -

"Continuation is the norm. Disturbances in continuation are points of deviation.

a. process reversal - when one process changes to another - e.g. when, during a modulation, we reach the dominant and it is stressed, we then expect the modulating process to cease and the new key to be established.

b. delay in process - when a gap in the process occurs and then the process is continued.

Specific examples of each are found in the Chopin Prelude, Op. 28, No. 2. A process reversal occurs in the harmony. Notice that the bass line opens with E, D, G or VI-V-I in the key of G. B-A-D . . . but it does not . . . instead the A (V in the key of D) becomes the 5th of a half-diminished chord (D#-F#-A-C#) which becomes a diminished 7th chord in measure twelve, and then becomes a modulating chord (Italian sixth) in measure fourteen and finally moves to the 16/4 of E in measure fifteen."

"A delay in process is illustrated in the same Prelude at measures twelve-fourteen. Until this point the melody had started in each new succession on the last note of the old pattern. Here it starts on a different note, the A in measure fourteen. To emphasize that this is a delay in process the melody moves from A-E-F natural. Had it moved to F# it might have seemed like a repeat of measures ten and eleven. After this the melody again continues". . . .

Keep in mind the distinction between continuation and repetition. When something continues, it is going somewhere. Repetition is simply reiteration. "See the cow" is an example of continuation in prose (a horrible example). "See-See-See-" is an example of reiteration.

Completion and Closure -

There are two kinds of incompleteness:

1. a structural gap - something left out or skipped over -

2. a desire for closure - that is, when a pattern is good so far as it goes, but just hasn't gone on long enough to reach a satisfactory conclusion.

A structural gap is a place that needs to be filled in. For instance, the opening of the Bach Brandenburg Concerto No. 5 begins with gaps which are filled in by the descending scale passage on counts three and four. Because these gaps are filled in right away, there is little affective response. However, the next example, "Che faro senza Euridice" creates gaps which are not filled in so quickly, and the passage is therefore much more affective.

An example of the desire for closure is shown on page 130. Here the sudden interruption of the flow is a break in continuity that creates a need for closure. This is not a structural gap, because it is never filled in. . . the process of continuation satisfies one's expectations.

Saturation -

A passage which repeats over and over again causes the listener to expect a change - because it prevents continuation and because it prevents completion.

An example of saturation is the repeated figure in the 1st movement of Beethoven's Sixth Symphony. (example printed on page 136.)

"In a situation where repetition is not normal and understandable, the longer a pattern or process persists, the stronger the expectation of change." 136

"Tonality is probably the most important single facet of style--the sine qua non of even the most primitive musical organization." 138

However, one must not expect all reiteration to cause saturation. When a repeated figure is understood as part of the texture it does not create expectations of change. An example of this is the figure used in Debussy's Piano Prelude "Des Pas sur la Neige". Notice that this repeated figure is circular and doesn't want to go anywhere. A ground bass, on the other hand, has shape and tendencies of its own and thus is not a "static entity."

Melodic Completeness and Closure -

Our understanding of melodic completeness is always related to the particular case at hand. For instance a sustained tone will sometimes cause one to expect a change, but sometimes it is ignored because it is not prominent or because it acts in another way--say as a pedal point, for instance.

Our expectations of pitch movement are also related to the particular composition. Generally we expect a high note to come down and a low note to go up. But this depends on who has the note . . . for instance a bass singing a "high note" would be singing what a soprano might consider a low note . . . or a tuba playing its highest note would be playing a piccolo's lowest note (approximately). But in general, one could say that what "seems" low, seems relaxed, and vice-versa. The same could be said for tempo: slow tempi seem more relaxed than fast tempi. Likewise for dynamics--soft is more relaxed than loud. But, any of these generalities are subject to change according to the particular composition. . . just as the "still, small voice" had a greater effect than the big storm.

THE LAW OF RETURN

Recurrence is repetition after contrast. Reiteration is repetition without contrast. With the former we have expectations of return, but not necessarily with the latter.

Reiteration is "successive comparison." A pattern is established and the only jolt one receives occurs when there is a deviation in the pattern.

Recurrence is a going away and coming back sort of thing. Coming back brings relaxation.

An example of recurrence is the Beethoven Quartet, opus 131, 5th movement. Notation handout, p. 155.

THE WEAKENING OF SHAPE

There are two extremes: complete uniformity and total segregation. When there is no difference at all in successive elements we have complete uniformity. When the successive figures are so unrelated that we cannot distinguish any kind of shape at all, we have complete segregation.

Uniformity occurs with chromatic and whole-tone scales and with diminished and augmented triads. Because uniform progressions have no apparent goal, they seem ambiguous. And, ambiguous patterns create a desire for clarification. The point at which the process ends is a reversal, and is the climax of that process. On page 164 there is an example of a chromatic passage which illustrates uniformity (chromatic motion) and is thus ambiguous.

The Bruckner passage on page 165 shows a more complex kind of ambiguity. The rhythm is clear at a lower level (anapest) but at a higher level it is uniform, since there is a series of anapests. The same is true of the pitch succession: at a lower level there is a distinct pattern: fourth, half-step, descending minor third. But at a higher level it sounds like a series of augmented fourths. As Meyer indicates, the progression is not precisely uniform, but the differences are so slight as to be "subliminal."

Harmonic uniformity is produced in a number of ways:

1. equal intervals in succession
2. identical chord qualities in succession
3. identical chord progression (sequential)
4. a combination of any/all of the above

Examples:

1. Brahms Second Piano Sonata - series of diminished 7th chords, chromatic movement.
2. Schumann - Humoreske - series of diminished 7th chords. Debussy, Nuages - series of 9th chords.
3. page 168-sequences of chords.
4. Haydn - Sonata in A flat - example of uniform pitch and rhythmic succession, coupled with continuous sequential processes. see p. 172.

Some differences are so slight that they are hardly noticed, and thus give the impression of uniformity. See text notation, p. 180.

"Mind organizes texture." 185

"Again mind is not a tabula rasa, it organizes on the basis of past experience. If it conditions what is looked for, it modifies what is perceived." 187

Vague and uncertain progressions may create tensions--one expects the uncertainty to resolve itself. Example: Berlioz: Symphonie Fantastique.

Uncertainty may arise when the listener isn't sure whether or not a stimulus is thematic or not--e.g. is the sound the theme or the introduction to the theme? Example: Schubert, Symphony in C Major
Mozart: Piano Concerto in D Mino

Texture

Three textural situations:

1. Law of return:

2. Widely spaced texture operates like structural gaps--desire to fill in. Example: Berg, Lyric Suite. (see notation, p. 190)

3. A series of uniform stimuli may seem incomplete--perceived as an accompaniment for a theme or melody which is still to come--which is expected. Example: Mendelssohn - Italian Symphony.

In a fugue, one kind of texture is expected to be continuous. A change of texture under such circumstances causes doubt and uncertainty. Example: Handel Concerto Grosso No. 2 (see notation in text p. 191)

"Only gradually as the accompaniment becomes more active melodically, as though influenced by the fugal sections with which it alternates, does the listener begin to understand that the homophonic texture will eventually become part of the general polyphony of the fugue." 191-192

Weakening of texture -

Beethoven, Symphony No. 9, 1st Movement (see text--p. 193 for notation)

All features are incomplete and ambiguous to begin with, except the relation between figure and ground. This is clear, at first, but gets progressively less clear as the figure gets more like the ground.

DEVIATION IN PERFORMANCE

Ornamentation -
1. Ornaments inhibit (delay) arrival of the expected structural tone.
2. Ornaments create doubt and uncertainty, however momentary, as to which tone is the structural or substantive one." 207

Chromaticism -
"In the instrumental music of the classical period chromaticism is employed with great effectiveness but not generally speaking, in the construction of themes and melodies. . . . Rather chromaticism finds its place in the bridge passages and development sections where contrasting with the more regular and normal progressions of the theme groups, it combines with other types of deviation to create suspense and uncertainty." 221

Rubato, vibrato and tempo variations are all forms of deviation from the norm, and that is why they are expressive. Contrast to a mechanical performance.

Minor mode is more affective because it is more ambiguous and less stable than the major mode.

Consonance and Dissonance--the former represents the element of normalcy and repose; the latter represents the element of irregularity and disturbance.

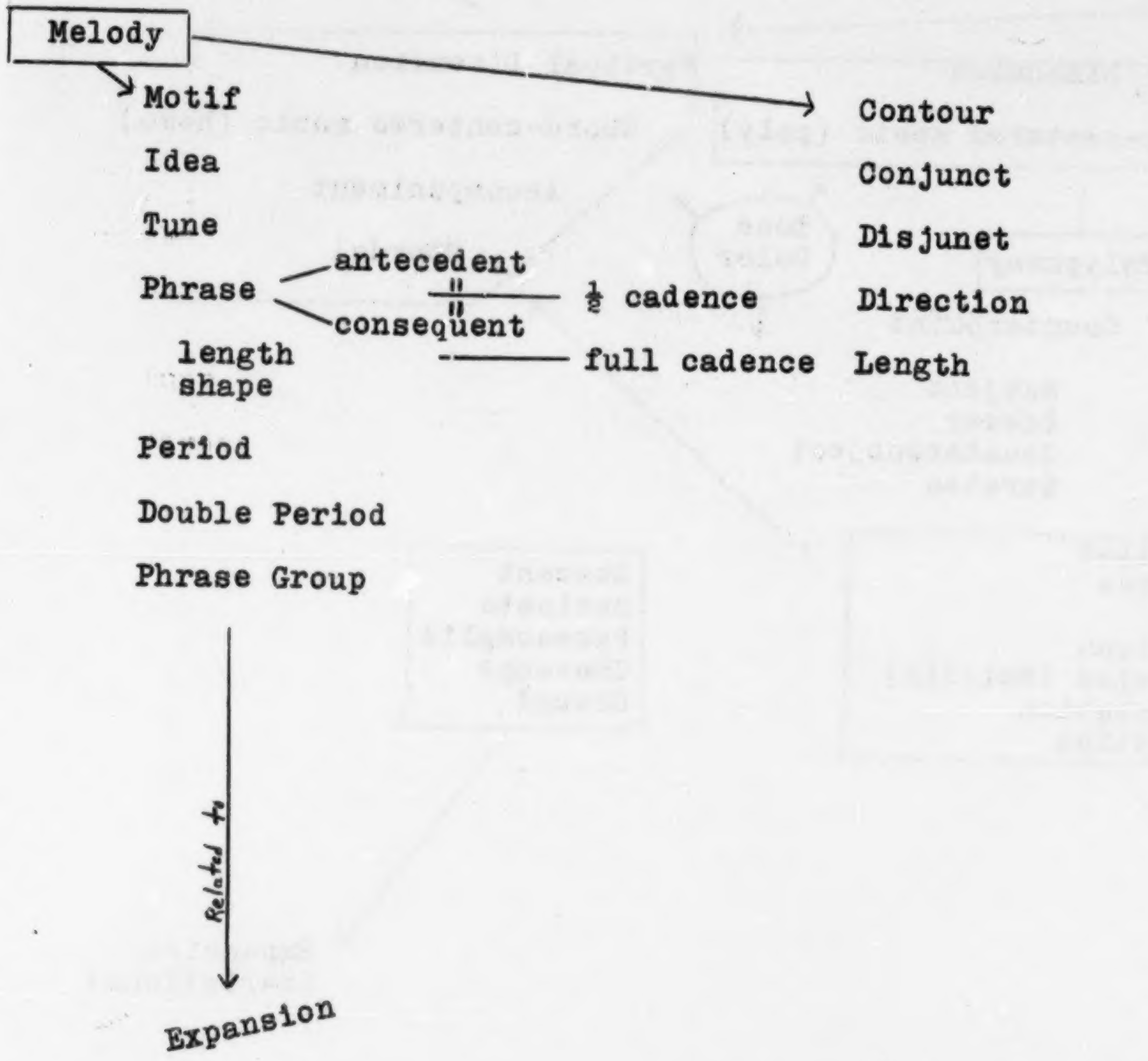
Recorded Musical Examples
for
Emotion and Meaning in Music

p. 48	Bach	Fugue in C Minor
p. 53	Beethoven	---------------omitted
p. 94	Chopin	Prelude Op. 28, No. 2
p. 97	Wagner	Liebestod from Tristan and Isolde
p. 102	Schumann	Piano Concerto, 1st mvmt., 1st theme
p. 105	Beethoven	Symphony No. 1, Minuetto---iambic
p. 105	Bizet	Carmen, Entr'acte, Act III---anapest
p. 105	Mozart	Quartet in A Major, Minuetto--trochaic
p. 105	Beethoven	Symphony 9, Scherzo---dactylic
p. 105	Haydn	Surprise Symphony, Minuetto-amphibrach
p. 117	Handel	Concerto Grosso No. 4
p. 119	Stravinsky	Histoire du Soldat, Soldiers March
p. 121	Ravel	String Quartet, 2nd Movement
p. 122	Debussy	Nocturne, Fetes
p. 123	Mozart	Sonata F Major, first movement
p. 125	Beethoven	Symphony No. 3, 2nd Movement
p. 130	Haydn	Symphony 104, Minuetto
p. 134	Bach	Brandenburg Concerto #5
p. 135	Beethoven	Symphony No. 6, 1st Movement
p. 137	Debussy	Piano Prelude, "Das Pas sur la Neige"
p. 140	Hindemith	Mathis der Maler, 1st Movement
p. 145	Beethoven	String Quartet, Opus 131, 5th Movement
p. 164	Liszt	Piano Sonata---omitted
p. 165	Bruckner	Symphony #7, 1st Movement
p. 166	Brahms	Piano Sonata No. 2, last movement
p. 167	Schumann	Humoreske, Opus 20
p. 167	Debussy	Nocturne, Nuages
p. 169	Bartok	String Quartet #5 - omitted
p. 172	Haydn	Piano Sonata A flat Major
p. 180	Berlioz	Symphonie Fantastique, 2nd Movement
p. 183	Schubert	Sumphony No. 9, C Major, 2nd Movement
p. 184	Mozart	Piano Concerto D Minor
p. 189	Berg	Lyric Suite, 5th Movement
p. 190	Mendelssohn	Italian Symphony, 4th Movement
p. 191	Handel	Concerto Grosso No. 2, Finale
p. 193	Beethoven	Symphony No. 9
p. 221	Mozart	Don Giovanni, Act I, Scene 2

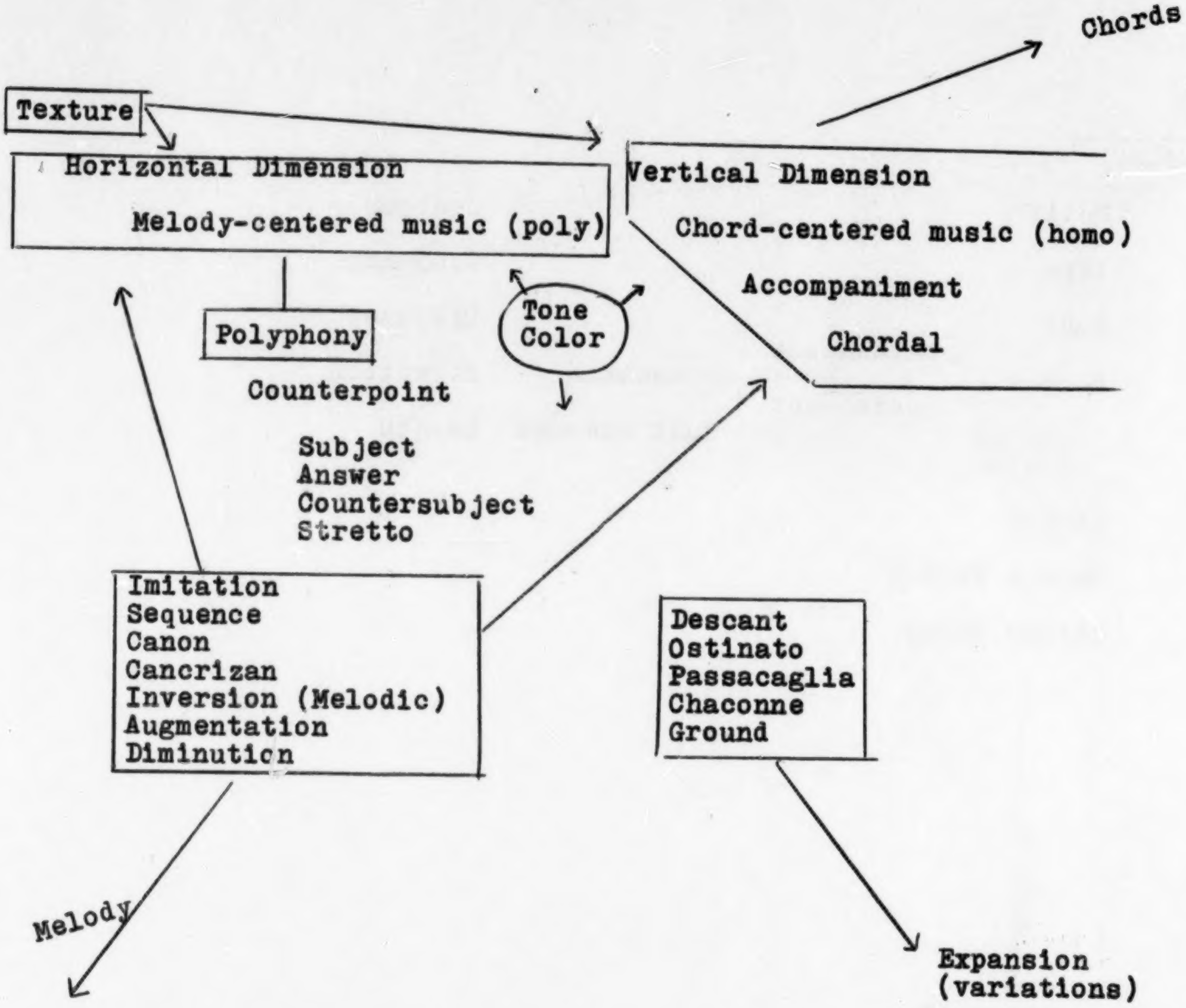
Meyer does not spell out elements or skills and knowledges necessary in his book but these are easily derived. One can find reference to the following abilities.

Recognize
- Like chords.
- Basic progression.
- Like rhythms.
- See relationship between melody and accompaniment.
- Know what is possible with a style.
- Hear modulations, changes of key, shifts in tonal center.
- Know usual root progressions, probability, as set forth by Piston, Zarlino and Rameau.
- Know laws of melodic progression (Lipps-Meyer law).
- Ascending and descending intervals.
- Accidentals.
- Number of repetitions of an interval.
- Whether the figure employed is in ascent or descent.
- Full cadence.
- Diatonic melodic motion (Wagner presupposes these as style norms)
- Non harmonic tones.
- Added 6th.
- Parallel phrases.
- Phrases beginning with common tone junctures.
- Differences in accompaniment and lead part.
- Comparison between rhythm and melodic line.
- Syncopation.
- Regularity.
- Meter differences.
- Intervallic progression upward.
- Break in vocal line (sequential progression).
- Accented and unaccented.
- Rhythm.
- Tonality - "the sine qua non" . . . of style.
- Tempi.
- Dynamics.
- Tessitura of instruments.
- Triad must be the norm.
- Metrical distrubance without metric incompleteness.
- Harmonic completeness.
- Shape.
- Uniformity.
- Wide distances between parts of a textural field.
- Deviations in performance.

An attempt was made to develop from Meyer an ordered arrangement of the elements as they would fit into a learning theory, in this case the learning theory of Ausubel.[6] The following charts show the result of this attempt. The large, subsuming concepts are placed in boxes; the other items derive from them. The levels are not discrete, but are meant to indicate generally a suggestive difficulty, pending experimental work. For example, "rhythm" is included at level four because of the complex intellectualization involved in recognizing and understanding it. The order of the items under each broad concept is not indicative of any hierarchy.



Melody
Motif
Idea
Tune
Phrase
antecedent
consequent
½ cadence
full cadence
length
shape
Period
Double Period
Phrase Group
Related to
Expansion
Contour
Conjunct
Disjunct
Direction
Length
Level one


Chords
Texture
Horizontal Dimension
Melody-centered music (poly)
Vertical Dimension
Chord-centered music (homo)
Accompaniment
Chordal
Polyphony
Tone
Color
Counterpoint
Subject
Answer
Countersubject
Stretto
Imitation
Sequence
Canon
Cancrizan
Inversion (Melodic)
Augmentation
Diminution
Descant
Ostinato
Passacaglia
Chaconne
Ground
Melody
Expansion
(variations)

Level two

Tonality
Key
Key Area
Modulation

Scale

- Keytone
- Modes
  - Major
  - Minor (3 forms)
    - Relative
    - Parallel
- Diatonic
  - Half-Step
  - Whole-Step
- Chromatic

Chord

- Root
- Primary Chords
- Quality (M,m,t(-))
- Dominant 7
- Inversion
- Altered Chords
- Broken Chord

Cadence

- IV - I
- V - I
- I - V
- V - VI

Intervals

Level three

Pulse (Beat)

Upbeat (anacrusis)

Downbeat

Rhythm

polyrhythm

Syncopation
Stress
Accentuation

Meter

Simple Duple
Compound Triple

Measure

Level four

The next level would perhaps involve form and the techniques of repetition, variation, development, imitation and transformation (expansion). Expression, mood, expectations, tension and repose and their relation to style can be dealt with very simply or become one of the broadest concepts.

At this juncture it was deemed important to give a listening test to non-experts in order to discover what they could hear in music. College students were chosen, rather than lay adults or public school pupils, for two reasons. (1) They were close enough to their public school years to reflect the effects of public school training; (2) they would be more able to verbalize, to cope with the difficulty of the test, and to summon the necessary concentration, than would public school pupils. The test was administered to college students from three Illinois universities, both music majors and non-music majors. They were given two "aids" not offered to the experts: they had a line score to follow for every composition, and they were given an oral explanation which included listing the musical elements commonly heard by educated listeners. This latter was done to help guide the less experienced listener so that his answers might more nearly indicate the true extent of his listening skill.

The compositions used for this test are given below. Each composition was heard four times.

Bach, Second Suite in B Minor, Third Movement
Pergolesi, Stabat Mater, Second Part
Haydn, String Quartet Opus 20 in F Minor, Second Movement
Brahms, String Quartet Opus 51, No. 2, Third Movement
Stravinsky, L' Histoire du Soldat, Fourth Movement (March)
Prokofieff, Classical Symphony, Third Movement

The completed line score tests were analyzed and the responses placed in one of two lists, musical response and non-musical response. The responses were also analyzed according to the listener's status of music major or non-music major.

LINE SCORE LISTENING TEST - COLLEGE MUSIC MAJORS

Musical Items Heard:

1. voice doubling by instrument
2. articulations
3. major cadence in minor context ("Picardy third")
4. form identification ("Aria")
5. dynamic change
6. recognition of accent, but not type
7. imitation
8. dissonance
9. repetition of small section
10. parallel motion
11. sequence
12. minor key
13. rhythmic repetition
14. recognition of unifying rhythmic figure (not that it unifies, but that it runs through composition)
15. recognition of large-scale repetition (vague)
16. rerun to beginning (not identified as ABA form, though)
17. notices Baroque ornamentation--without comment
18. melodic transference between instruments in rapid succession
19. indication of themes
20. use of nonharmonic tones as embellishments
21. "jazz rhythms" (in Stravinsky)
22. meter changes
23. tempo change
24. V^7 -- I cadence
25. countermelody
26. arpeggios
27. basic I-IV-V progression
28. "steady" beat
29. delayed cadence
30. identification of periods and composers (no reasons given)
31. recognition of superimposition of figuration over theme (no descriptive vocabulary)
32. unusual accentuation--3rd beat sf (but no vocabulary: "lots of feeling")
33. AB form(without vocabulary = a change of thought)
34. identification of: period and style
35. identification of: lead tone (in connection with performance)
36. use of figured bass
37. minor and major cadences and key
38. cadence recognition
39. cadential anticipation
40. V - I cadence
41. dynamic changes and contrasts
42. indication of phrase ending
43. indication of large interval
44. articulation contrast
45. repetition of rhythm
46. repetition of theme

COLLEGE MUSIC MAJORS

Musical Items Heard (cont.)

47. prominent accents (visual recognition)
48. emphasized octave leap (without recognition of use as accentual device)
49. contrary bass motion
50. chromatic motion
51. pedal ("held note")
52. descending scale (heard, not seen)
53. use of ornamentation
54. introduction to solo orchestra interlude
55. solo vs. group
56. modulation
57. imitation
58. moving bass (under static solo line)
59. indication of theme (by what instrument hears it)
60. function of rest to contrast with sound
61. linear, rather than vertical accompaniment
62. variety through slight alterations in phrase repetitions
63. tension (with no indication of musical means)
64. melodic predominance

Non-musical Items Heard:

1. misunderstanding of term "syncopation"
2. identification of language in vocal work
3. mis-identification of language in vocal work
4. importance of ornament (trill) over-rated
5. instrumental identification to exclusion of much else
6. mis-identification of stylistic period
7. mis-identification of form
   mis-identification of minor and major
8. imposition of performance techniques on score
9. criticism of: performance
   recording
   test administration
   examples chosen
10. description of visual, rather than aural factors
11. non-analytical terminology ("very peaceful" "rhythm simple" "tempo is even")
12. imposition of program ("It sounds like a song of nature--not a sad song nor happy either")
13. descriptions of instruments and techniques
14. criticism of performance ("Singer needs breath")
15. Lack of terminology ("Smooth")
16. "change of mood"
17. appreciative comments ("good")
18. assumption of correct performance, incorrect score
19. identification of Brahms as Baroque composer
20. misuse of term "syncopation"

COLLEGE MUSIC MAJORS

Non-musical Items Heard (cont.)

21. identification of Brahms as Hindemith
22. criticism of selection chosen for test
23. criticism of tape used for test
24. here's a selection of quotations:

"special effect"
"feeling of finality"
"tricky rhythm"
"what a part for the trumpet to cut. WOW!"
"laughing effect"

LINE SCORE LISTENING TEST - COLLEGE NON-MUSIC MAJORS

Musical Items Heard:

1. tempo change (due to performance)
2. crescendo ("increased volume")
3. recognition of performance medium
*4. modification of theme (2 got this; was missed by most music majors)
5. recognition of second part of AB form as "variation"
6. minor-major alternation
7. recognition of minor key
8. recognition of the unexpected (contrast)
9. recognition of unusual grouping ("5 notes together")
10. recognition of changing meter ("odd counting in spots")(grupetto)
11. recognition of march
12. general identification of the obvious outstanding features (for example octaves in melody of Prokofiev-Classical Symphony, 3rd movement) to greater extent than music majors, but no vocabulary for expression (this is typical of all tested, however)
13. recognition of contrasting dynamic levels
14. instrumental voice-doubling
15. orchestrational variety as a stylistic feature
*16. use of repetition of phrases and rhythmic patterns
17. descending scale (heard)
18. V-I cadence
*19. Note: some use of technical vocabulary: i.e., "terraced dynamics"; "chromatic ascending" not found in music majors' tests. But wide divergence in skills among those tested.
20. semi-identification of stylistic influence--example: "Far--East: for 1/2 step pattern in Stravinsky "L' Historie du Soldat"
21. identification of style and composer
22. rhythmic repetition
23. bass motion
24. harmonic voice spacing
25. melodic dominance
26. imitation ("bass repeats treble melody")
27. sequence ("incomplete definition repetition of same melody")
28. repetition of theme
29. repetition of phrases
30. repetition at lower pitch
31. altered repetition
32. recognition of rhythm of theme (without vocabulary to express it)
33. minor-major recognition
34. type of composition (quartet symphony)
35. major cadence in minor key ("tierce de Picardie")
36. use of sequences
37. deceptive cadence
38. tempo indication ("fast")
39. ABA minuet form (one recognition)
40. two part (AB) form (one recognition)

COLLEGE NON-MUSIC MAJORS

Musical Items Heard (cont.)

41. repetition within small space of time
42. repetition as an aspect of form (one recognition)
43. modulation to relative major (not stated in precise terms; given as "minor to major" or as "F minor to Ad major")
44. melodic variation (little recognition)
45. changing meter
46. syncopation
47. dynamic contrast (sometimes indicated by circling dynamic symbols)
48. accentuation (no differentiation between types)
49. attempt at simple harmonic analysis (one)
50. rhythmic variant
51. imitation of rhythmic motiv (not identified as such)
52. use of counter melody (one)
53. melodic predominance
54. "very unified composition, well constructed" (no indication of method)
55. recognition of figured bass (one)
56. use of close spacing
57. indication of choral appearances and changes
58. construction of melody in harmonic minor scale (one)
59. descending line under prolonged trill
60. identification of a lead tone (one)
61. contrast between solo violin and full group in string quartet
62. terraced dynamics (one)
63. string accompaniment follows vocal line
64. recognition of third beat strong dynamic accent by work "interesting"
65. pedal point
66. use of octaves in theme (as identifying factor)

Non-musical Items Heard:

1. critical of style ("too abrupt")
2. terminology ("flows")
3. imposition of performance characteristics on score
4. mis-identification of syncopation
5. programmatic (little)
6. criticism of performance
7. hears non-existent fugue
8. identification of language in vocal selection
9. criticism of performance ("soprano off pitch")
10. hearing only instruments
11. correction of line score to accord with performance
12. use of non-musical descriptive terms ("light or gay" "sombre" "galloping pattern" etc.)
13. identification of items seen on line score, rather than heard (key changes, intervals, language of vocal selection, dynamics, etc.)
14. inability to use technical terminology to describe musical phenomena (ex: use of imposed musical symbols to describe dynamics)

COLLEGE NON-MUSIC MAJORS

Non-musical Items Heard (cont.)

15. tendency to hear non-existent instruments (example: horn in a string quartet)
16. musical features heard in terms of instruments (example: instead of "pedal"--"cello holds E")
17. indication of strong individual preference ("I hate it" "ugh")
18. historic and stylistic inaccuracy (confusion of Baroque and Classical, Renaissance with Classical, use of harpsichord in Renaissance)
19. false identification of theme
20. non-recognition of simple forms (example: minuet and trio identified as two movements, or trio mentioned as second theme)
21. use of appreciative comments without supporting evidence ("good" "interesting" "exciting" "odd" "clear" "unusual" "nice" "beautiful")
22. programmatic items greatly exceed music majors' tests
23. use of non-musical terminology ("smooth; determined, tender," etc. (also "serious; weird")
24. criticism of performance some on very low level--"WOW!" for execution of trill
25. criticism of composition, without foundation:
    "This variation is too long--more contrast"
    "Good delay" However, might be turned to good account with proper training
26. value judgments "nice dynamics"
27. supply of socio-econ background connected in great detail with superimposed program political

Results from testing non-experts tended to confirm all previous findings; listeners, even those with relatively little training, can and do hear specific elements in the music, which make it meaningful and which contribute to the desired listening experience. In most cases hearing musical elements depends upon having specific knowledges or skills. Where these are not present the listener's reactions are erroneous and (usually) his pleasure slight.

Chapter II - Footnotes

[1] Ralph Tyler, paper given at Sixth Annual Symposium on Educational Research, The Training and Nature of Educational Researchers, ed. text by Egon Guba, Bloomington, Phi Delta Kappa, 1965, p. 8.

[2] Gerald Abraham, This Modern Music, New York: W. W. Norton, 1952, pp. 23-24.

[3] Homer Ulrich, Music: A Design for Listening, New York: Harcourt Brace and Company, 1957, pp. 4-5.

[4] Ibid., pp. 8-10.

[5] Paul Farnsworth, The Social Psychology of Music, New York: Dryden Press, 1958, pp. 180-181.

[6] David Ausubel, The Psychology of Meaningful Verbal Learning, New York: Grune and Stratton, 1963.

Chapter III

The material described in Chapter II confirmed general agreement that possession of certain knowledges and skills by the listener enhances his chance for a high level musical experience. Presumably, these skills and knowledges are a necessity, although this question was not answered in the study. They would appear to be necessary for the listener to perceive the meaning of music as posited by Leonard B. Meyer. Thus, the consensus was that knowledges and skills are valuable; they should be taught as they may be the only area of music listening which can actually be taught. Further, there seems to be little disagreement as to what elements, knowledges and skills are desirable.

There are many ways that elements, skills and knowledges such as determined by this study might be taught. Curriculum work in elementary music is so limited that no teaching approach has been either discarded or favored due to experimental work. In this study, four different approaches were used. They are referred to in the tables as K, F, L and A, indicating respectively textbook emphasis, stress on keyboard performance; textbook emphasis, stress on factual information; expectation emphasis, stress on listening; and textbook emphasis, stress on aural-singing approach. Each of these approaches, or emphases, occupied one-fourth of the school year. Each emphasis had different objectives and was evaluated with different measures. Most of the classrooms used in the study followed the same sequence of emphases, with each class beginning at a different place in the sequence, as explained on page 112. The assumption was made that any difference in the ordering of learning experiences might affect the results even for this limited trial period. This assumption was based upon the further assumption that a pedagogical order can exist for the field of music instruction, comparable to the pedagogical order of other disciplines, and that the present unordered curriculum which generally exists for music is not the final answer.

Related to the proper ordering of learning experiences is the inherent difficulty of any item to be learned. For example, some experts contacted in the study expressed doubt that children could grasp the concept of a phrase until they could understand the meaning of "phrase" as applied to language. Obviously, if this is true there are also many other concepts basic to music teaching which may be beyond the level of the children to whom they are now being introduced. In such a case, skillful teaching could accomplish little; the problem would be one of content rather than of method. Further, the great art music of the centuries was not written as teaching material, and its use for this purpose might hamper learning rather than further it. In this connection, one suggestion was made that musical listening be taught to children through the use of lesser art works--Hummel rather than Beethoven, Carrissimi rather than Mozart--so that the great works could be approached fresh when the student was sufficiently mature and experienced. This is a tantilizing suggestion, but one which was not incorporated into the present study.

Situations

The plan of the original proposal was to teach four classes of 4th grade students in two cities, each group of four taught by the same teacher to avoid teacher variable. In implementing the proposal, fifth grade students were used rather than fourth, for the following reasons: better teachers were available at the fifth grade level, a number of teachers felt that the project had a better chance of success with the fifth grade child and better teaching situations could be arranged. Justification for the change of grade level, if any is needed, is supplied by the findings of music achievement studies. Research in this area has found that, with the exception of factual knowledge, no learnings take place in one year of elementary music which may not be attributable to maturation or influences outside of school. In many instances, even growth in factual knowledge is not sufficient to be significant. Therefore, it was felt that the change of grade level would have no affect upon the outcome of the study. Some thirty-five school systems were screened from the Illinois public school systems, with the help of the State Supervisor of Music and the music education personnel at the major institutions of higher learning in the state. These thirty-five were visited by the investigator and five situations selected.

Schools with both average students and gifted students were desired. If poor results were obtained with children and teachers who were above average, the chances that the material could be successfully used in average situations would be lessened.

Situation 1. Music specialist with three classrooms in an above average school in a university community, where students could be presumed to have had average or above average experiences with music.

Situation 2. Music specialist with two classrooms, in a laboratory school on a university campus where students could be presumed to have had average or above average experiences with music. This was a different city from that of situation 1.

Situation 3. Music specialist with two classrooms, in an average school located in an industrial suburb drawing from middle class families. The school system places special emphasis on music.

Situation 4. Music specialist with four classrooms, in an average school in the suburbs drawing from middle class families.

Situation 5. Music specialist with five classrooms, in an above average school in the suburbs drawing from the junior executive class.

This arrangement provided four test situations rather than the planned two. One class from Situation 5 was combined with Situation 1 to make a 4 x 4 arrangement. Situations 2 and 3 were combined to allow for the 4 x 4 design. Situation 4 was left intact. The original design was satisfied in that situations 4 and 5 each provided a 4 x 4 design with the same teacher. The additional schools strengthened the basic design in allowing certain teachers with special skills to participate in the study, and allowing one situation close-by which the investigator could observe frequently. All the teachers followed the same sequence of experiences, with the exception of teacher 4, who followed the original completely random design. The design was:

	Time Period 1	Period 2	Period 3	Period 4
Group A	X_1(L)	X_2(A)	X_3(K)	X_4(F)
Group B	X_2(A)	X_3(K)	X_4(F)	X_1(L)
Group C	X_3(K)	X_4(F)	X_1(L)	X_2(A)
Group D	X_4(F)	X_1(L)	X_2(A)	X_3(K)

School 4

Group A	X_1(A)	X_2(L)	X_3(K)	X_4(F)
Group B	X_2(L)	X_4(F)	X_1(A)	X_3(K)
Group C	X_4(F)	X_3(K)	X_2(L)	X_1(A)
Group D	X_3(K)	X_1(A)	X_4(F)	X_2(L)

This design, followed by situations 1, 2, 3, and 5, allowed some practice at transition from one set of experiences to the next, and it also allowed the teacher to relate each set of experiences with those which preceded and followed. The random design used by situation 4 was superior for experimental purposes, but presented great difficulties for the teacher as far as materials, continuity, and objectives were concerned. Each nine weeks set of experiences was conceived by the investigator as a separate entity, but it was difficult for the teachers to accept this fact. Since the basic interest of the project was listening, it seemed logical that all lessons should point toward the nine weeks in which listening activities, expectation emphasis, were stressed.

Every school used in the study had to make modifications in its schedule to conform to the requirements of the study. At present, no uniformity exists as to the length or frequency of music periods within the school week. After each school had adjusted as much as possible for the sake of uniformity, the following situation obtained.

Situation 1. Classes met three times per week, 30 minute periods.
Situation 2. Classes met daily, 30 minute periods.
Situation 3. Classes met three times per week, two 30 minute periods, one 20 minute period.

Situation 4. Classes met daily, 20 minute periods.

Situation 5. Classes met twice weekly, 40 minute periods.

As situation 4 and 5 were not compared, the differences in time and scheduling were not a factor in these situations. The differences could be a factor in situations 1, 2 and 3, where there was also the teacher variable to consider in evaluating the results. The time factor between situations 2 and 3 (which were combined to make the 4 x 4 design) was not as great as it seems, due to the fact that situation 2 was a laboratory school which conformed to the university schedule of holidays and had less days of instruction than situation 3. On the other hand, situation 3 had a performance obligation at Christmas which usurped some class time.

In situation 1, a modification of the design was made in regard to pupil selection. In this situation, ability grouping is practiced throughout the school system, with one school primarily serving the gifted student. The particular school used in the project is the most nearly average of the grade schools in the community, but ability grouping is also practiced within the school, so that one group was definitely inferior to the others in intellectual ability. However, even with the "gifted" student transported to another school in the community, situation 1 represented the highest I.Q. average of any of the five schools used for the study. In situations 2, 3, 4 and 5, ability grouping was not practiced; the students were assigned to classes at random. Situation 5 involved sixth grade students rather than fifth grade students. This meant that one sixth grade class would be compared with the fifth grade classes of situation 1, as they were combined to make the 4 x 4 design. Although this sixth grade class has an average I.Q. of over 112, is better than the national average on the achievement test, ITBS, has good instruction and a superior home environment, there was no evidence in this study that the additional year of instruction played any part in affecting the scores in this study.

During the course of the first semester, sufficient interest was generated among the other teachers in situation 4 that the design was expanded for the second semester to include seven additional classes. Although this cannot be considered a part of the project proper, it does assist in evaluating the results of the project. Each of the seven classes received two sets of experiences, each set nine weeks in length. The classes were arranged into a 4 x 2 and a 3 x 2 design. Results are furnished in the tables for these classes, and information is also provided to allow comparison of the different learning materials when they are taught by the same teacher. Another outgrowth from the project occurred in situation 4. Four additional classes participated in a full semester's study of keyboard work. Professor James Lyke of the University of Illinois' class piano department assisted in planning the nine week keyboard materials. When interest was exhibited in having a complete semester's work in this area, Mr. Lyke developed the additional materials, with the aid of the investigator.

One further addition to the original design was use of a control group on each of the final examinations. In each of the five communities used for the study, a control group was selected which took a final examination but had only the regular instruction. In some situations the same control group took all four examinations, in others a different control group took each test. This is reflected in the tables.

Conduct of the Project

Second semester, 1963-64, was spent primarily in defining the elements, skills and knowledges as reported in Chapter II. An assumption was made which proved to be erroneous, that a complete, detailed curriculum would not be needed by the teachers involved in the project. The development of materials was envisioned as a cooperative venture between teachers and investigator, the latter indicating what objectives were desired in the light of Meyer's theory, and the former making suggestions as to the specific activities which might accomplish the objectives. The areas of aural skills and factual knowledges were estimated to be those in which the music specialist would be most experienced and be able to operate with independence, while the areas of keyboard and listening would demand more direction from the investigator. This assumption was not correct. The teachers were reluctant to go ahead in any area with the selection of teaching materials and activities; at all times they felt some insecurity as to what the project required. Therefore, all lessons had to be prepared in great detail by the investigator, and sufficient time had not been allowed to carefully prepare four complete courses of study. Only three months had been alloted for preparation of the materials. In view of the fact that all such preparation became the responsibility of the investigator, a full year would have been more adequate for the size of this task.

One week before the school year opened, a workshop was held for the cooperating teachers and their supervisors, with Mr. Leonard B. Meyer in attendance. The objectives of the workshop were to explain the theory of expectation, explain broadly what the project was attempting to accomplish, discuss some of the initial materials and lessons plans, and review the testing materials.

The actual teaching portion of the study began without a knowledge of how long it would take to accomplish certain objectives or cover certain materials. Although this procedure is normal in many curriculum projects where the teaching is done by the project director or graduate assistants, it is not recommended for field testing programs with the arts. Some of the materials and objectives could be explored in great detail over a long period of time, and a natural uneasiness was present in the teachers as to how much time or emphasis each lesson required for the purposes of the project. With five situations, each varying in time spent as well as in teacher and pupil ability, this was impossible to determine. A guideline was established to the effect that the teacher should spend whatever amount of time was reasonable to ensure that fifty per cent of the class achieved the objectives. Without experimental evidence, only the teacher in the classroom can determine what is a reasonable time allotment for an activity, and at what point interest begins to lag. During the first nine weeks, therefore, materials were still being written and revised, time estimations made, and difficulty evaluated. During this time period tests were not given, and this fact is reflected in the tables.

By the second nine weeks, a pattern was established so that the materials could be organized to conclude at the end of three week periods. This facilitated the construction and administration of tests every third week.

Structured programs generally do not exist in music. A program of concentrated learning such as that presented in this project is totally absent; when materials similar to those of the project are covered in the music class, they are spread over a year's program or more, rather than being concentrated into a nine week unit.

Music classes, like other classes in the public school, are missed for field trips, scheduled or special assemblies, holidays, or enriching activities. For the purposes of the project, Christmas and other programs were minimized or eliminated, but even a few class periods spent in rehearsing Christmas music might result in one or two week's loss of instruction. Thus, a limited amount of time was available for instruction in each of the four areas. Even so, however, more time was available for music than is typical of the average situation. The five schools were selected because, among other reasons, they had music specialists and devoted a maximum amount of time to music per week. Several of them increased their time for music to accommodate the requirements of the project. The Illinois State Office of Public Instruction recommends one hundred minutes of music per week, but in very few schools do students receive time anywhere close to this amount.

The original design for the study did not include the giving of a musical aptitude test. This decision was reversed, and the Seashore Measures of Musical Talent given to all participating students the first week of school. As has been stated, the classes used in the study were not selected at random, a design which is rarely possible in the public schools. In view of this, it was desirable to obtain information as to the musical aptitude or achievement of the students at the outset, for later purposes of comparison. The Seashore tests are admittedly not accurate measures of aptitude, but they have not yet been replaced by a better music aptitude test. At least indirectly, many of the items on the Seashore reflect the types of learnings which are desired in the elementary school--awareness of pitch, rhythmic sense, tonal memory, and to a lesser extent volume, time and timbre. The skills required by the Seashore measures are for the most part those used in making fine discriminations and comparisons, in interpretation or listening, although the test requirements are both more stringent and less musical than the classroom situation. If not adequate as a measure of aptitude, the Seashore tests can yet provide valuable information as to ability. For example, there is ample evidence that the person who can make accurate discriminations in intonation with respect to performance or listening activities will do well on the pitch section of the Seashore; similar evidence exists for other sections of the test.

Data was obtained from two other measures which might provide information concerning student ability: the intelligence quotient and the score on the Iowa Test of Basic Skills adjusted to November 1964.

Five tests were suggested in the original design. Evaluation was a major problem, and some test substitutions were made in order to improve this facet of the study. Good tests for measuring elementary school music objectives do not exist. Music tests of any sort are few in nature, and of these even fewer are accurate or appropriate. Without carefully developed measures, it is difficult to make accurate judgments of the results of any treatment. It was considered highly undesirable to put full confidence in measures developed specifically for the project; at least one published test seemed a necessity. Since musical memory is a crucial factor in listening, the Drake Musical Memory Test was considered. The test, no paragon, is presently out of print; permission was obtained from the publisher to reprint it. (A very similar version now in print is the Drake Musical Aptitude Test, indicating that Drake may now believe musical memory to be aptitude rather than achievement, although no written statement could be found on this point.) The test is marred by unmusical examples and by the fact that in most questions the musical passage to be retained is repeated (for recognition) only after many interfering versions. Although in listening to music one is called upon to recognize a theme or idea after lengthy intervening passages, the intervening material is rarely designed to be interfering. In the test, the listener must recognize small deviations as such, and retain the exact original in mind to identify it when it returns. Established norms for the test are such that students can do well on the test even when missing a majority of the items. Teacher fears about the test were partially allayed when they saw how well their students did compared with the norms. The Drake test furnished an independent pre-post measure on one important aspect of the study.

Other tests were not used as pre-post measurement. One reason was that preparation of the materials was developmental in nature, hence a constructed test might not apply closely to the actual learning content as it was fully evolved. A further reason was that constructed tests would have no established reliability and might therefore be misleading in their results. The test referred to as the Colwell Test is shown in the tables with a growth score; the growth score must be interpreted as only a general comparison rather than as specific measurement, for the following reason. The pre and post Colwell Tests were different tests: entire sections of the earlier test were omitted in the post test, as these areas were not specifically covered in the instruction; many of the questions were different; the posttest was taken with an IBM answer sheet, the pretest was not; much was learned about measurement in the course of the year, and this was reflected in the test changes. Both test scores are percentiles, and because both tests were measuring the same general areas of skills, a comparison was felt to give sufficient information as to be of value. Fatigue factor was checked in the posttest, and confirmed as of great importance in music listening measures. It would appear that no music test involving concentrated listening can last more than one half hour without the results being seriously affected.

Other evaluative tools were designed to measure what could be accomplished in a certain period of time such as the nine week period, and were not meant to show growth.

Another difficulty was to obtain an adequate number of measurements without usurping instruction time. More feedback was possible from short tests than from classroom observation, for the material was obviously successful with the better students, and the reaction of the majority of the class could not be determined from observation. Few tests could be given in a single 20 minute class period, less time for the necessary administration and organization details. Even short tests often took more than one period, so that with the minimum tests listed in the tables nearly one-fourth of the time was spent in measurement.

With the addition of the second semester experimental groups, a pre-post test was added which was administered to the keyboard group only. The test given was the Farnum Music Notation Test, a readiness test which provides a measure of the student's ability to read music or follow a score. The keyboard units progressed to the point where reading was an objective; in the other situations, reading also was an objective to the extent of ability to follow a line score. After two classes had had keyboard experiences, the materials were sufficiently set that a constructed pre-post test was felt to have value. This test was constructed and administered as indicated in the tables.

A discussion of the evaluation and its results is reserved for Chapter IV.

Reference has already been made to the materials used and the teachers involved in the project. Obviously, both are of prime importance to any study or learning. Although the teachers varied somewhat in ability and experience, they had been carefully selected and with one exception could be considered among the finest in the Illinois public schools. Every effort was made to encourage the teachers to teach in the manner and using the approaches with which they were familiar and expert. Observation of the teaching showed that the teachers made small innovations in method, but never were willing to make departures from the material or organization prepared by the investigator. It is believed that without exception they adhered closely to the lessons plans provided.

In evaluating the results of the study, the most crucial question is whether the teaching-learning situation of the study was sufficiently ideal as to permit acceptance or rejection of the learning objectives. With good teachers, a greater than average time allotment, and thorough preparation of materials, is it reasonable to reject as impractical the objectives which the students failed to achieve, and accept as possible the objectives which were achieved? The following assumption appears to be a sound one: in at least three of the four areas of concentration--keyboard, factual and listening--lack of improvement under the circumstances of the study would cast serious doubts as to the validity of the objectives or content for one year in the average public school music class. The area of aural achievement may be excepted from this assumption, since a greater quantity of time is spent, in the course of a year, on this area of elementary music than was possible within the nine weeks' period.

The nine week keyboard concentration will serve to illustrate the reasonableness of this assumption. This amount of intensive keyboard work with music specialists is more keyboard instruction than the average school could integrate into its program (as presently structured) in a two year period or longer. The fact that the instruction was concentrated increased its advantages, as far less opportunity occurred for forgetting and loss of skill. The keyboard situation was heavily weighted with positive factors: two pianos were available for each classroom, a class piano expert not only helped prepare the materials but also did demonstration teaching in each school and consulted frequently with the teachers on special problems. The interest level was high; students were eager to learn to play the piano as the approach used songs which they knew and avoided the necessarily tedious emphasis on technical facility. The high interest was evidenced by the number of students who, during this period, began the study of private piano, and the fact that the teachers were barraged by student requests for additional practice time. The teachers themselves spent out-of-school time listening to the students perform their keyboard tasks and marking off items such as those on the checklist in the appendix. Such a concentrated learning situation rarely exists in music, and one might safely say is never found in the average classoom. Comparable, if somewhat modified, statements can be made for the areas of listening and factual learning. If the objectives had been such that maturation played a major part, one might question the maximal quality of these situations, but for the most part the knowledges and skills desired were not of this type. Even in the area of aural-singing activities, the nine week situation was sufficiently more intensive in the learnings presented that it would compare favorably with the usual year's activities in this area. Therefore, the assumption seems valid that where students failed to improve under these circumstances, the objectives and materials were not feasible for average public school music classes.

This final report does not include all of the teaching materials used for several reasons. An effort was made to place all learnings within as musical a context as possible, so that much of the material was presented on tape with musical examples or helps. Many other materials were provided the teacher which included, for the keyboard area, plastic keyboards, the Pace Piano for Classroom Music Manual, paper keyboards for written exercises, work sheets for student self appraisal and mimeographed words for songs so that children could sing to the tunes they were learning to play. For the listening area, workbook-type sheets were provided for the students to answer regarding each listening lesson, line scores and guided listening tapes were additional helps. The report does include all of the objectives, all of the keyboard lesson plans plus representative lesson plans from the other areas to indicate the approach taken in the project. These appear at the end of this chapter. The only true basis upon which to judge the teaching-learning situation would be tapes of the actual classes. The assumption is made that the teachers consistently taught well; in the bi-weekly visits this was always the case. They spent far more time in preparation than they would have for a normal situation, and in those cases where the teacher was teaching four different areas to the fifth grade at once (plus her responsibilities to other grades), the burden of preparation was enormous. As the material became more familiar, the teachers naturally became more skillful in presenting it. The reason for any failures which occurred should not be construed as teacher-centered, for the teachers were capable, cooperative, and hard-working.

Lesson No. 1

1. Discover highs and lows of keyboard, and where singing range is located. Experiment with several sounds. Note arrangements of blacks--feel your way by these groupings.

2. Explain how fingers are numbered for piano playing. Practice wiggling the appropriate finger that the teacher calls out. Use each hand. Can place fingers together for numbering, thumbs are 1, index 2, middle 3, etc.

3. Sing Go Tell Aunt Rhodie or Hot Cross Buns (familiar song learned in lower grades). Five-finger position--establishes definite tonality. (Music for Go Tell Aunt Rhodie was sent to you. Mr. Lyke suggests that the blackboard works very well and it is not necessary for the students to have the music for all numbers.)

CALL ATTENTION
TO STEPS, SKIPS
AND REPEATED TONES
OF MELODY

   1) note direction of melody
   2) sing again, but with finger numbers of R.H.
   3) play and sing in the positions indicated (F,G,A) with R.H.
   4) sing L.H. finger numbers (bottom of page)
   5) play and sing L.H. number in positions indicated (D^b, D,E)

TEACHER CAN
SHOW BY
DUMMY
KEYBOARD

4. Have one or two children who have mastered this well play; the teacher supplying a I and V_7 accompaniment. Ask the class what the teacher did that enhanced the tune or melody. Discuss chords-harmony and difference between I and V.

Same procedure as 3 with Merrily We Roll Along

Definite and Measurable Objectives on Lesson No. 1

1. Know where ones singing range is on the piano--learn by discovery with attempts to match pitch. Check to see if the singing range is the same for most people in the room.

2. Know high and low parts of keyboard.

3. Know finger numbering system.

5. Point out if Go Tell Aunt Rhodie is scale or skipwise; likewise for Hot Cross Buns. Point out what happens on the keyboard that makes skips and scalewise passages different.

6. Know what a chord is.

7. Know what harmony is.

N.B. As suggested at the conference reduce playing of songs to two keys. Reduce left hand melody work but still give them this at least once during the quarter so they know that melody is not always on top and one must listen to determine where it is.

Lesson No. 2

1. Review Go Tell Aunt Rhodie and Merrily We Roll Along (both hands).

2. Teach Little River Flowing in R.H., place thumb on C--experiment by ear with thumb on D. Find correct relationships--try to have them discover the step relationship of first five notes of major scale. Find by ear--then explain. Play with L.H. in C. STEPS, REPEATED NOTES
Have class assume L.H. 5 FP (finger pattern) leaving out fingers 4 and 2 (C major chord) and play melody with R.H. while some chord C major on strong pulse of every measure. Mention I chord, since bottom tone is first note of the pattern.

3. Find several major chords by ear. Teacher plays melodies to the following which can be harmonized with I only: Little Tom Tinker, Farmer in the Dell, Taps, Frere Jacques, Row, Row, Row Your Boat.

4. Show how keys are lettered--A to A (inside top 2 of group of 3 blacks). Find how many different A's there are, etc.

Definite and Measurable Objectives on Lesson No. 2

1. Be able to find 2 note major sounds (chords) by ear.

2. Be able to play 5 notes as in Little River Flowing and tell major sound.

3. Be able to find A on the keyboard.

4. Be able to chord along together while teacher or part of class sings songs suggested in lesson number 3.

5. Find total number of A's on the piano.

6. Understand what an octave is.

7. If discerning major and minor is difficult, sing a major scale, have student check the piano sound against their singing do re me fa sol, 1, 2, 3, 4, 5 or whatever system you use.

Lesson No. 3

1. Review building I chord--use both right and left hand. (L.H. 5-3-1; R.H. 1-3-5). Sing arpeggiated. Play arpeggiated. Play all notes together several times. Build chords on C, G and F. Memorize the C, G and F chords as "white note chords" or "WWW." Also play the 5-finger pattern starting on C and G. Have students note that the notes for these patterns are all white. Then try F, and have students discover they must use a black (B^b) to have the pattern sound like the others.

Teachers may wish to introduce the two-note chord first. To avoid having children play in G^{b}, teacher can play melody and have students chord or have class sing melody while everyone plays G^{b} and B^{b}, the 2-note chord in the left hand.

2. Using the C, F and G chord, harmonize on the strong pulses (several students at a piano) songs from the 2nd lesson. This might be review or new: Farmer in the Dell, Frere Jacques (Are You Sleeping), Row, Row, Row Your Boat. For example, teacher plays Farmer in the Dell in C, Frere Jacques in F, or Row, Row, Row Your Boat in C. Part of class could also sing melody if only one piano is in the room. Have students chant chord to melody. The students will, no doubt, experience difficulty in coordinating their fingers for these chords. This is typical, and the teacher will need to drill and review for some of the students. Also get across the idea that we name a chord (ex.--C chord) from the bottom note.

3. a. Drill names of notes again (proceeding from A to A. (1)Teacher plays a note on her keyboard (held so all can see)--students respond with correct letter. (2) Line up several students at the piano or pianos, and call out letter names--have the students play the note.

   b. Explain #(sharps) and b(flats) on the keyboard. Get across the concept that a # or b does not necessarily mean a black note, but does mean raising or lowering a note. For example, B# or Fb. Teacher should point these out on her keyboard, then have students locate several #'s and b's. Teacher should use the blackboard, dummy keyboard and the pianos to illustrate #'s and b's.

Definite and Measurable Objectives for Lesson No. 3

1. Know the concept of a chord (two, three or more notes sounded together).
2. Be able to play I chords in both hands.
3. Memorize the C, G and F chords as "white note chords."
4. Chord an accompaniment with one of the chords, C, G or F. Should be played on first beats or more often but done rhythmically correct.
5. Feel strong beats while chording an accompaniment in ensemble.
6. Coordinate the fingers in order to play the chords well.
7. Know names of notes (white) A to A.
8. Understand that a # means raising a pitch to the next nearest note, and the a ^{b} lowers the pitch to the next nearest note (not necessarily a black).

Lesson No. 4

1. a. By finger number diagram, teach the melody to Lightly Row in the G pattern.

```
R.H.  5                   5 5 5
            4           4
        3 3           3
              2 2   2
                  1
```

L.H.

1 1 1
2
3 3 3
4 4
5 5

b. Transpose this piece to the F pattern being very careful that fingers stay close to the keys and that 4 in R.H., 2 in L.H. rests on B^b.

c. Teacher can supply a I V^6_5 accompaniment.

d. Some children should try the melody on the piano or pianos.

N.B. The teacher should memorize these finger number diagrams, so that she can sing numbers and play along on the dummy keyboard. Children can then obtain help by looking up when they experience difficulty.

2. Show the melody to Lightly Row in notation (key of F) calling attention to steps, skips and repeated tones. The children should note that space to space or line to line means "skip" and line to same line or space to same space means "same."

a. What should transfer here is the same picture of the melody that was used when the song was taught by finger numbers--point this out.

b. Right hand is playing in treble (high) clef; Left hand is playing in bass (low) clef.

c. Clap the rhythm of the song thus:

two-eighths quarter | two-eighths quarter |
two-eighths two-eights | two-eighths quarter |
two-eighths quarter | two-eighths quarter |
two-eighths two-eighths | half-note ||

3. Have students discover by ear the fact that another chord is needed besides I to harmonize this tune. Explain the V_7 (V^6_5 to the teacher) to the children as (1) a tension-producing chord that wants to move to I, (2) built from I or the five finger pattern thus: L.H. thumb stays the same, put 2nd finger down in the pattern, move 5th finger down to the next nearest note. May use two-note chord if teacher plays melody in G^b--students use G^b and B^b and F and C^b. This may reduce the mechanical problem of 3 fingers together. Practice this in C, moving from C,E,G to B,F,G and back to C,E,G. (I-V_7-I). Practice and play. Try this in G (note F# as the next nearest note down that the 5th finger moves to). Try in F (note 2 playing B^b which is in the pattern).

Definite and Measurable Objectives for Lesson No. 4

1. Learn a new melody (Lightly Row) and play the melody in the R.H. (high) and L.H. (low).

2. Know that melodies can be both high and low, and are often in the L.H.

3. Have ability to transpose Lightly Row to another pattern (key).

4. Understand why an additional chord (V_7) is needed to harmonize Lightly Row. (It doesn't sound right otherwise.)

5. Knowledge that I and V_7 are the two most-used chords in music.

6. Unmeasurable but important to see Lightly Row as it looks in notation, in both clefs, and observing steps, skips and repeated tones. This does not mean being able to read the notes--introduce whatever ideas time allows.

7. Be able to clap and feel the rhythm of Lightly Row, naming the rhythmic values while clapping (may be memorized at this stage).

8. Be able to build a V_7 (3-note) in several different patterns.

9. Know the fact and hopefully understand through the ear that V_7 demands resolution. (Tension-release concept).

Lesson No. 5

1. a. Using the printed Melody Guide, teach Old McDonald. First sing, then shape, then play with finger numbers in the air and finally transfer to the keyboard. Note that this pattern is not a five finger pattern as we have had in previous songs. Explain this as a pentatonic pattern or scale--a 6-note scale played very easily on the piano by using only the blacks (2 + 3 or 3 + 2). The teachers might contrast this with the regular 8-note major scale--playing or singing it for the children. (Purpose is only to show that all scales do not sound alike. We are concerned with sound of the 8-note scale)

   b. E--i--ee-i-o can be harmonized with I and V_7 thus:

   E--i ee-i-o
   I V_7 I

   Instead of using the I V_7 I learned in the last lesson, and to facilitate playing in G^b, teach the children 2-note chords instead of 3-note chords for the L.H. It would consist of the notes G^b-B^b fingered $\begin{smallmatrix}2\\4\end{smallmatrix}$ in the L.H.; V_7 would consist of F, C^b fingered 5-1 in the L.H.

While one or two students play the melody on the piano, another could harmonize at this spot--those at their seats should practice manipulating these chords also. Most students, with practice, could manage both melody and harmony. Have the students visualize I as blacks and V_7 as white, immediately outside the two blacks.

2. Review Lightly Row.

3. Review building, spelling and playing the C, F, and G chords and their corresponding 5-finger patterns. The C, F, and G chords should be memorized and visualized as white note chords (WWW). Introduce the D chord (D-F#-A). Let the children discover the need to change F to F#, so that the pattern sounds like the others. This chord can be visualized as WBW. The A chord (A-C#-E) and E chord (E-G#-B) are the others which belong to this group. Teach these and the corresponding 5-finger patterns. Work I V_7 I in the patterns or keys of D, A and E.

Definite and Measurable Objectives for Lesson No. 5

1. Learning a new melody in the R.H., Old McDonald.
2. Experiencing a new pattern in the R.H. using all blacks, the pentatonic pattern.
3. Harmonizing in G^b with I and V_7, two-note chords.
4. Reviewing white-note chords, playing and building the C, F and G chords (WWW).
5. Adding to the students' chord vocabulary the D, A and E chords (WBW).
6. Playing I V_7 I in D, A and E.
7. Reviewing and playing Lightly Row using both hands for melody playing.

Class should be able to chant chords (sing roots) of melodies played. Students should see that they could sing other notes played in a chord to produce harmony in singing. Perhaps better students can sing a chord note other than the root to these melodies. After playing Old McDonald students should be able to hear mistakes in melody, rhythm and harmony of their own or when played or sung by others.

Stopped at any spot in melody playing, student should be able to find next note by himself (by ear).

Try to have students sing home tone when stopped at any spot in Old McDonald.

Lesson No. 6

1. a. Teach Sally Go Round (using the Melody Guide) in the D pattern--R.H. playing the melody. Call attention to the black in the middle. This melody may be a little unfamiliar, so the usual steps--singing, shaping, finger numbers--should be followed. Show the melody in notation, call attention to chord tones (D,F# or A). Have the children point out or circle those melody tones which are not chord tones. Teach that these are nonharmonic (not belonging in the chord) tones. In this melody we have passing tones and upper and lower neighboring tones (sometimes called adjacent or auxilliary tones). These should be identified, learned, and pointed out in future songs.

   b. After mastering the melody, notate it, and have the students decide the harmony for each measure. Notate the chords exactly the way they play them (I or V_{65}). Check the piece from the music sent if you are not sure of details. Give the students some experience in writing the chords, especially the I. Get across the concept that the I chord will read line-line-line; or space-space-space depending upon the key. Have some students chord the harmony while another student, or the teacher plays or sings the melody. Musical phrases should be stressed. This piece consists of two 4-bar phrases, the first ending on a half (or incomplete) cadence (V_{65}) the second ending in an authentic (or complete) cadence (V_{65}-I).

Definite and Measurable Objectives for Lesson No. 6

1. Play Sally Go Round in $\frac{6}{8}$.

2. Know about nonharmonic tones, and identify them.

3. Know about a phrase.

4. Be exposed to the cadences (half and authentic).

5. Notate chords. (I or V)

6. Hear correct harmony from incorrect.

7. See both melody and harmony in notation. (nonmeasurable)

Lesson No. 7

1. Introduce staff notation in the following manner:

   a. Have the children understand that two staves are used for piano music (joined together by a bracket). They should count lines (5) and spaces (4) from the board.

   b. They should note that generally the treble (G) clef is used by the R.H. and that the bass (F) clef is used by the L.H.

c. There are certain guideposts that they can see and relate to pitches on their keyboards and piano(s) in the room (1) middle C (middle of keyboard, in singing range below 2 blacks) (2) G above middle C which the treble clef circles (3) F below middle C which is dotted above and below the F line by the bass clef.

d. The staff should be lettered in the same way students lettered their keyboards, e.g. A to A beginning with 1st space 𝄢 A through the first leger (added) line above 𝄞 clef. A through G in each case should be bracketed.

2. a. Review Little River Flowing in C from finger numbers.

R.H. 1 2 3 4 5 -- 5 -- 5 4 3 2 1

b. Notate this on the board (music sent) in C beginning on middle C. Have the students clap the rhythm: two-eighths ♫ two-eighths ♫ quarter ♩ quarter ♩ two-eighths ♫ two-eights ♫ half-note. 𝅗𝅥

c. Have the children note the step-wise character of the melody and repeated tones.

d. Knowing the beginning note is G, have them sing letter names to the melody (C--D--E, F--G-- G etc.).

e. Sing letter names again and play the melody at the keyboards at the same time.

f. Try this same procedure singing and playing the melody in the L.H.

g. See if one of the students can notate the I (C) chord in the 𝄢 clef. Find out which measures of the 4 (this song is a single phrase) that I could harmonize (1, 2 + 4) (I / I / V_7 / I). Pick another student or two to notate the V^6_5; knowing how their fingers move to this chord, see if they can transfer this knowledge to notation.

h. Play the melody and the harmony with both hands in C.

i. Locate nonharmonic tones and V_7.

Objectives for Lesson No. 7

1. Introducing staff notation and connecting important guideposts to the piano keyboard.

2. Knowing that generally, the R.H. plays in 𝄞 clef, and the L.H. in 𝄢 clef.

3. Lettering the staff, and seeing relationships to the lettering of the piano keyboard.

4. Seeing and playing melody Little River Flowing from notation, singing letter names instead of finger members in both hands.

5. (a) Notating I and V_7 (V_{65}) in the 𝄢 clef for each measure.
   (b) Hearing the correct harmony for each measure.

6. Playing both melody and harmony at the same time.

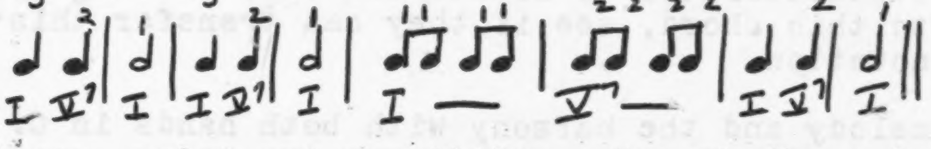
Lesson No. 8

1. Student Performance. Those who are taking lessons should be allowed to play for the class frequently. A student pianist gives the nonpianists motivation to learn as much as possible and an opportunity to discuss compositions in light of what he knows from the keyboard sessions. Such things as phrase, cadence, repetition, contrast, harmony, tone color and pedaling can be topics of conversation which lead to further understanding of the piano and its use as an expressive instrument.

2. Review staff notation. Have several students at the board locate pitches while those at the piano and at their seats find these pitches at the keyboard. Have students letter the staff, name spaces, lines, draw clefs and leger lines.

3. Using similar procedure as with Little River, notate Hot Cross Buns in G^b. Don't bother with trying to explain the key signature. See if the students can determine where the 1st note should be placed if do, or 1 is pointed out.

Hot Cross Buns:



Two phrases, point out repetition, clap rhythm and notate chords underneath the melody. The I chord here should be stressed as BBB (black, black, black). Have the children locate the five finger pattern in the L.H. (G^b pattern) and practice I V_7 (V_{65}) I.

4. By ear, have the children harmonize some of the following suggested songs which use the I and V$_7$ chords only. Use keys D, A, F and B^b: Skip to My Lou, The More We Get Together, Polly Wolly Doodle, Down in the Valley, Oh Where Has My Little Dog Gone, and London Bridge.

Objectives for Lesson No. 8

1. Discussion of musical elements in the pieces of student pianists.
2. Drilling and reviewing clefs, lines and spaces and relating guideposts and pitches to the piano keyboard.
3. Playing the melody and harmony to Hot Cross Buns from notation in the Key of G^b.
4. Harmonizing with I and V$_7$ several familiar songs.
5. Hearing and anticipating correct harmonic change.
6. Being able to write at the board the correct letters for lines and spaces in both clefs.

Lesson No. 9

1. The teacher should play the following scale melodies, and ask the children if they know the pattern name for these melodies (scale).

a. Joy to the World 8
7
6
5
4
3
2
1

b. French Folk Song $\frac{6}{8}$ 888
777
666
5
444
333
222
1

Play the ascending scale and have the children sing numbers, and later letters to such keys as C, F and G. Have the children note that certain adjustments (#'s and b's) have to be made in keys other than C to make the scale sound the same. This is the reason we have key signatures--show the signatures of G and F in both clefs. Do not stress scale fingering at this point. The notes can be played by using the 2nd finger of the R.H.

c. Another tune which makes use of the scale is The First Noel (which, however, starts on 3 and goes to 1, then ascends encompassing the whole scale.

2. Begin keyboard melodic improvisation on black note pentatonic patterns in the R.H. Either 11 111 or 111 11 rhythmically, is usable. In the lower range of the keyboard the teacher can start a 4 4 ostinato pattern of 5ths (E^b to B^b) which gives an Indian drum effect. Over these repeated 5ths, one or two students should improvise a melody (slow note values like 𝅝 𝅗𝅥 and 𝅗𝅥) which shows some understanding of form (thinking phrase wise and using repetition and contrast) and a sense of developing an idea. Capitalize on the successful attempts and talk about the properties of a good melody. (tunefulness, complete idea, etc.).

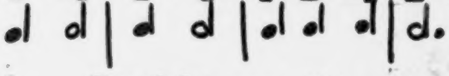
Objectives for Lesson No. 9

1. Understanding what a scale sounds like.
2. Playing a scale in a few keys and making proper adjustments in pitch (to make the whole-half step sequence the same).
3. Understanding the need of a key signature and seeing them in both clefs.
4. Hearing the scale used as a part of the melody in three songs.
5. Improvising (creating) melodies and using previous experience with melody to make a few generalizations as to what constitutes a "good melody."

Lesson No. 10

1. On the board, have the melody German folk song Cuckoo notated in E^b (music sent). Locate the tones in the E^b pattern in the R.H. (I chord is BWB) and in the L.H. Practice I V_7 (V_{65}) I in the L.H. and in the R.H. (Finger V_{65} in the R.H. $\begin{smallmatrix}5\\2\\1\end{smallmatrix}$).

   a. Sing the pitch names from the board in rhythm (ex. B^b-G--B^b-G--F-E^b-F-E^b---)



   b. Decide on the correct harmony together, and chord from symbols placed on the board.

   c. Chords should be notated after deciding on the harmony.

   d. Circle and identify nonharmonic tones, chord tones and cadences (3) at the end of every four bars. (1) authentic or complete (2) imperfect authentic (root not in soprano) (3) authentic or complete.

e. Decide how the melody should be fingered.

f. From the board explain that the I chord is built on the 1st degree of the scale in 3rds (skips). Likewise II is built on the second degree etc. Look at V--built in 3rds, and to be V_7 we add another 3rd making four tones. To play our V_7, we leave out a tone (5th) and move the bottom note to the top (inverting) the chord. This makes an easy V_7 (V_{65}) for our fingers to reach, not as clumsy as playing V_7 in what is called root position. Every chord has a root, and we can harmonize with chord roots only. With the teacher playing the melody, the students should harmonize Cuckoo with E^b (root of I chord using 5th finger on L.H.), and B^b (root of V_7 chord using thumb in L.H.). The students can also sing these roots. Use the key E^b (same key as Cuckoo number) and also key of C.

g. When the teacher has shown I and V_7 in root position the children then can finger (with pointer only) and sing these chords in arpeggio form I--E^b G B^b G E^b; V_7-B^b D F B^b F D B^b; I--E^b G B^b G E^b). The teacher can point to these pitches at the board from the notated root position chords. Build, sing and resolve these chords also in C. (C-E-G-E-C; G-E-D-F-D-B-G; C-E-G-E-C). Also practice sing just the roots of I-V_7 I (E^b-E^b-E^b; C-G-C) and select other keys.

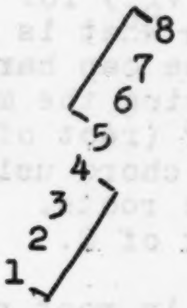
2. Continue pentatonic improvisation on blacks over ostinato 5ths. Also try a "loping" L.H. accompaniment which would lend itself to a cowboy-like tune in the R.H. L.H. ostinato 4 G^b D^b E^b D^b:
1 5 6 5
(scale tones).

Objectives for Lesson No. 10

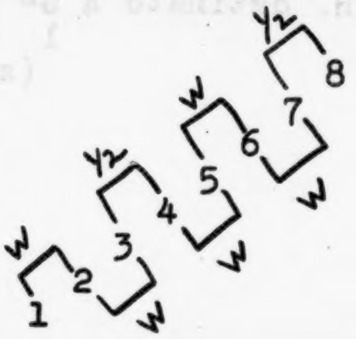
1. Playing a tune from notation.
2. Singing pitch names from notation.
3. Experiencing the E^b tonality.
4. Hearing and deciding upon chord changes.
5. Identifying nonharmonic and chord tones, cadences and phrases.
6. Fingering a melody from notation.
7. Understanding that chords are built on scale degrees, can be inverted, and all chords have roots.
8. Harmonizing with chord roots.
9. Singing chords in arpeggio form.
10. Improvising over an ostinato in a pentatonic pattern.

Lesson No. 11

1. Review songs using scale melodies (Joy to the World, French Folk Song and The First Noel). Notate the scale in C in both 𝄢: and 𝄞 clef having the class sing pitches while the teacher points to the notes. Bracket two groups of 4 tones each thus:

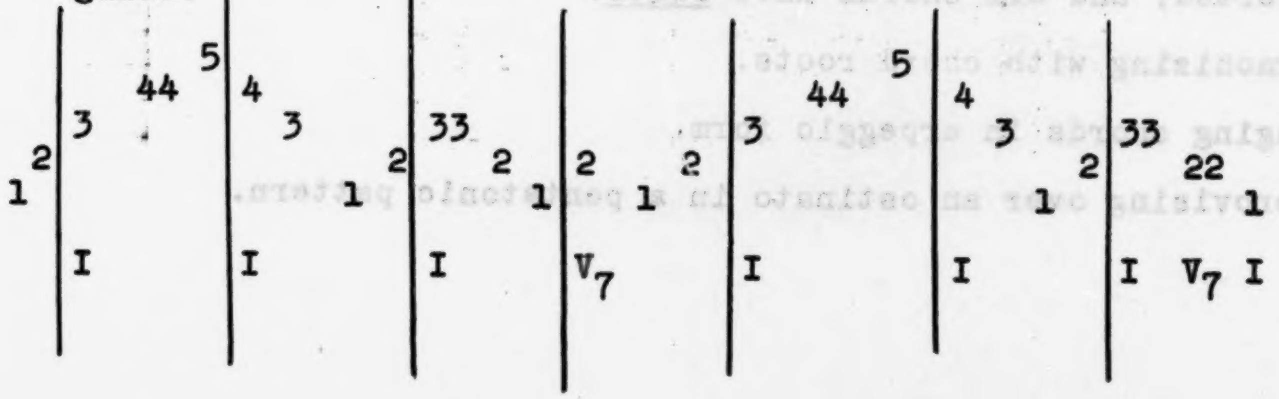


Explain each bracket of 4 tones as a tetrachord (tetra = 4) being careful not to confuse this word with chord. Every scale has a lower and upper tetrachord. The scale can now be fingered using both hands; L.H. will play the tones of the lower tetrachord fingering it 5 4 3 2; R.H. will play the tones of the upper tetrachord fingering it 2 3 4 5. Note that thumbs are not used when playing tetrachord scales. The key of C should be used first. When the children are fingering and playing their tetrachord scales, point out the arrangements of whole steps and half steps which constitute a major scale.



Note that half steps occur between 3 and 4; 7 and 8. No matter what tone is the beginning tone, this arrangement will remain the same. Experiment with keys of G and D--find the #'s which belong to these keys in order to make the whole-half step arrangement the same.

2. Teach the first 2 phrases of O Susanna in G^b (or F#). Note that the R.H. is in the familiar pentatonic pattern. Teacher guide:



Ask the class: 1. How many phrases (2)
2. Type of cadence at end of each phrase (half or incomplete and perfect authentic)
3. Decide upon harmony
4. Transpose to G making sure of the skip between 3(B) and 4(D). Fingers should remain close to the keys.

Objectives for Lesson No. 11

1. Singing a scale from notation.
2. Understanding a tetrachord.
3. Fingering some tetrachord scales.
4. Understanding the whole-half step arrangement of a major scale.
5. Learning a new song in the pentatonic pattern.
6. Identifying phrases and cadences.
7. Hearing correct harmony for O Susanna.
8. Transposing O Susanna up ½ step.

Lesson No. 12

1. Put melody of attached German Folk Song on the board. (Use key of D^b). Students establish tonality of D^b by
   a. Locating and playing the 5 finger pattern with both hands.
   b. Playing I V_7 I with both left and right hands.
   c. Playing the D^b scale in tetrachord form:

L.H.				R.H.			
D^b	E^b	F	G^b	A^b	B^b	G	D^b
5	4	3	2	2	3	4	5

2. Students should understand the reason for the 5 flats in the key signature after playing the scale. Similar approach to teaching key signatures all along--have their ear tell them why.
3. Before playing the melody in the R.H. attempt to determine:
   a. Number of phrases (2--each 6 measures long)
   b. Meter--does it swing in 2's or 3's (naturally the meter signature would have to be omitted until the answer has been given.)
   c. Name of starting tone and the correct finger (F played with 3rd finger)

d. Which measures are exactly alike? (1,2,3 and 7,8,9; 4 and 8).

e. Measures which outline a chord in the melody (3 and 9). This would then be the chord used in the bass.

If these things cannot be seen, then play the number and see how many more can answer the questions after hearing the number.

4. When students play the number, they might decide on the correct chords by ear. If they know about nonharmonic tones, you might do some work here. They should understand that the chord in the L.H. need not harmonize with every note in the melody as usually occurs with church hymns. The melody notes that are not found in the chord played by the L.H. are called nonharmonic tones. The nonharmonic tones (lower neighbors) are circled in this number and are always F in the measures harmonized with the V_7 chord.

5. Trouble spots might be rhythm and fingering in next to last measure. If some drill doesn't clear this up, skip it.

6. They have just built a Black-White-Black chord. Might try some others (E^b and A^b).

When bored--build tetrachord scales in flat keys.

Objective is to show the whole-half step arrangement from playing. In lesson 11 they worked on C, G and D. Now try G^b and note same arrangement. Once they have G^b continue on to D^b, A^b, E^b, B^b and F. Students will note that 4th finger in the R.H. will drop a flat in each new key (adding a white key of course). When you do this with sharps, the 4th finger of the R.H. always adds a new sharp (black key except in the case of E# in the key of F#).

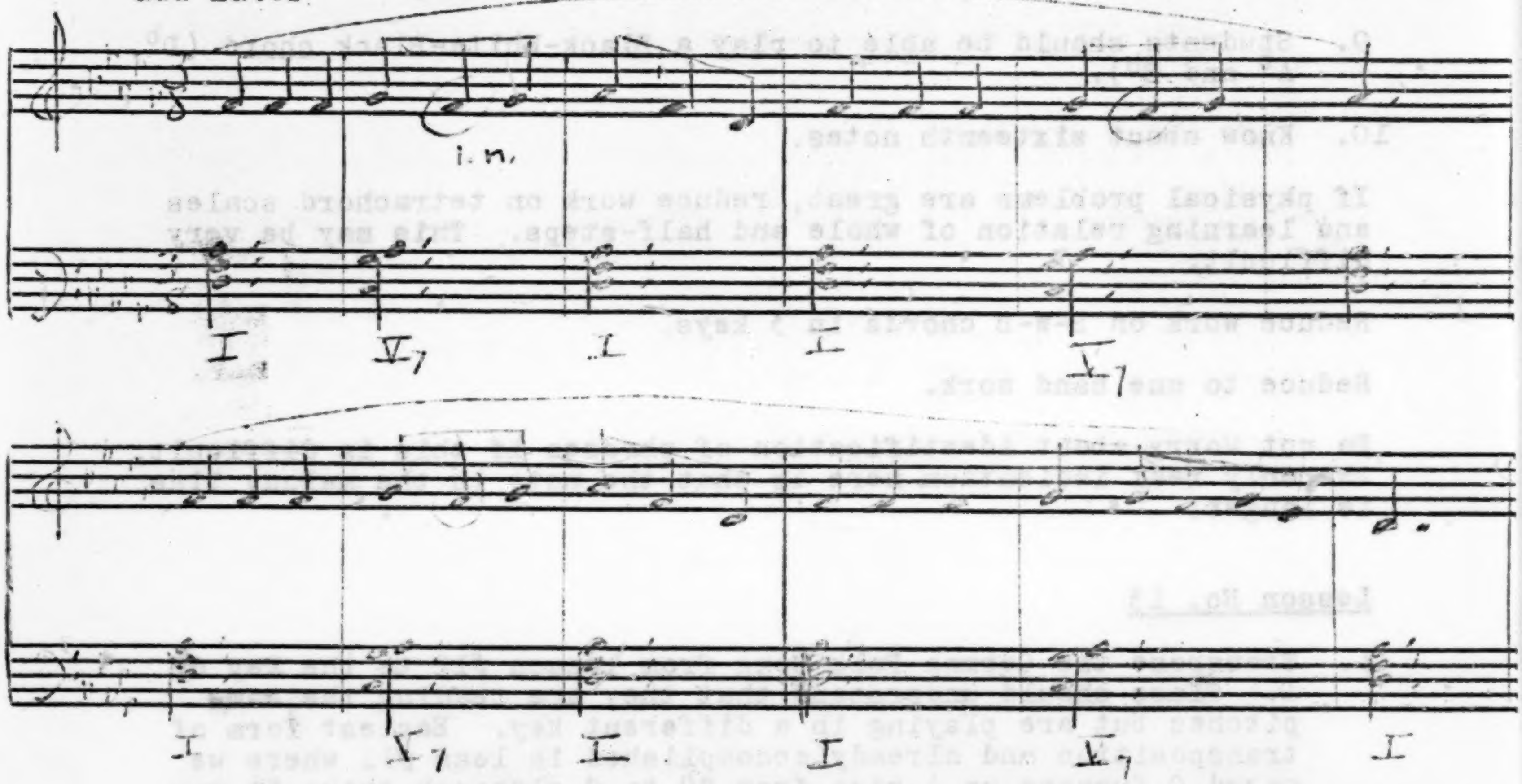
Objectives for Lesson No. 12

1. Students should know about the whole-half-step arrangement in scales.
2. Students should be better at identifying phrases either by sight or sound.
3. Students should be better at identifying meter either by sight or sound.
4. Students should know what $\frac{3}{8}$ meter is.
5. Students should be able to see repetition in music.
6. Students should be able to see chord tones in the melodic line.
7. Students might be able to see nonharmonic tones in the melodic line.

Lesson No. 12

German Folk Song

add later


i.n.
I
V7
I
I
V7
I
V7
I
V7
I

8. Students should be better at harmonizing a song.

9. Students should be able to play a Black-White-Black chord (D^b, A^b and E^b).

10. Know about sixteenth notes.

If physical problems are great, reduce work on tetrachord scales and learning relation of whole and half-steps. This may be very difficult.

Reduce work on B-W-B chords in 3 keys.

Reduce to one hand work.

Do not worry about identification of phrases if this is difficult, the only real indication here is that the note in the melody line is longer.

Lesson No. 13

1. Transpose the German Folk Song from lesson #12 to the key of D. Class should understand that they are reading the same pitches but are playing in a different key. Easiest form of transposition and already accomplished in less #11 where we moved O Susanna up ½ step from G^b to G although there it was not done from notation.

2. Work on establishing keys of songs in the students by:

   a. Playing a 5 finger pattern.

   b. Playing the I V_7 I

   c. Build a scale in tetrachord fashion.

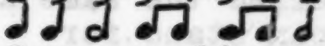
   d. Sing the I and V_7 chords as arpeggios while fingering on the keyboard. Point out how chords are built (I chord starts on the first note of the scale, a V chord on the fifth degree of the scale, chords have a root, third and fifth unless there is a 7 after the chord like V_7 where we have 4 notes, a root, third, fifth and 7th.

   Might tell them that we sometimes mix these up (using the same notes) and then we call them inversions. This is done to simplify fingering on the piano or for variety.

3. Students might play only the roots to harmonize. Some students might sing the root. Some students might sing the melody. More advanced students might play the melody.

4. Tonal Memory Game Time.
You might devise better forms and rules.

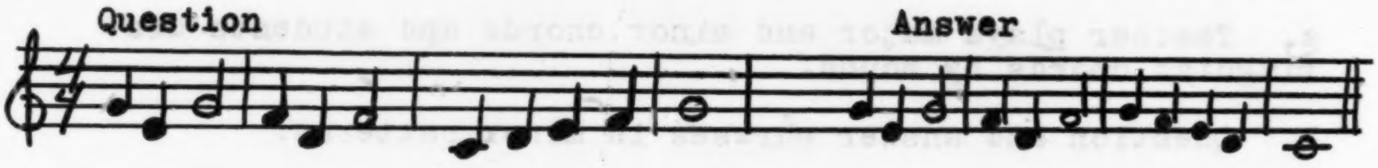
a. Teacher plays a tonal fragment. Student plays back in maximum of two attempts. Example might be playing 1-3-5-5-4-3-2-1



Rows can line up and you can have an old fashioned spelling bee. The more musical these fragments are, the better.

b. Hard game for smart alecks.
Teacher plays phrase I (4 bars) which ends in a half or incomplete cadence. Student must complete it with second phrase, ending on do with a perfect authentic cadence.

Maybe best to start with parallel periods???



Correct rhythm may be biggest problem for students. This game combines tonal memory with improvisation (creating an ending for their phrase).

Objectives for Lesson No. 13

1. Know what transposing is and perhaps do a little.
2. Know how a chord is built and sing some chords in root position arpeggiated.
3. Improved tonal memory in ability to play back a tonal pattern.
4. Know about an answering phrase, question and answer.

Perhaps be a little more creative in improvising answers to question phrases; sing chord roots to a song as it is played.

Lesson No. 14

1. Introduce the minor mode by playing or singing the first two phrases of Erie Canal in the key of D minor. Ask the class if the second phrase is like or different than the first phrase. Have the class listen to the chords in the last two measures of each phrase. (I I I V_7 I). If the I chord is named from its root, or lowest tone, what is this chord called? (D minor). Notate the melody of one phrase and notate the I

or d minor chord in its proper place. Sing the tones in arpeggio form (D-F-A-F-D). How do we spell a D major chord? Practice building and playing several minor chords by first building major chords and then lowering the middle tone. Notate V_7 in Erie Canal, and have the class understand that V_7 in minor sounds and is spelled the same as in the parallel major. Example: V_7 in C minor G-B-D-F is spelled the same as in C major. Also, note that key signatures can stand for major or minor keys. One must look through the piece (melody and chords) to determine if the piece is in a major or minor key.

Learn Erie Canal, both melody and chords, and transpose to other minor patterns, such as C minor or A minor. Practice minor 5 finger patterns, I, V_7, and I, and singing chords.

2. Aural Work

   a. Teacher plays major and minor chords and students distinguish chords by sound.

   b. Question and answer phrases in minor patterns.

   c. Teacher plays familiar songs like Johnny Comes Marching Home, Zum Gali Gali, Charlie is My Darling, Poor Wayfaring Stranger, Go Down Moses, O Come, O Come Immanuel, Pat-A-Pan interspersed with songs in major, and students recognize the mode-whether the song is in a major or a minor key.

Objectives for Lesson No. 14

1. Begin to understand the minor mode (mood).
2. Know how to build and play a minor chord from a given major chord (by lowering the 3rd).
3. Know that V_7 in minor keys is spelled and sounds the same as V_7 in the parallel major (e.g. V_7 in D major and D minor is spelled A-G#-E-G).
4. Know that key signatures can denote minor as well as major keys and that the home tone determines.
5. Hear the difference between major and minor chords.
6. Identify by ear major and minor songs.
7. Be able to play a minor 5 finger pattern.
8. Improvise answer phrases in minor.

Lesson No. 15

1. Review (a) minor chords (b) five finger minor patterns on several tones such as F, G, D, E, (c) playing I, V_7 I in minor.
2. Harmonize, after singing with the teacher, the first half of the song Drill Ye Tarriers (Ginn, Book 5, C Minor) using I and V_7.
3. Sight read in G Beethoven's Ode to Joy theme:

Determine (a) Nonharmonic tones (passing tones, anticipation in measures 4, 8, 16)

(b) Form (3 Part, A A B A)

(c) Cadences (Half, Perfect Authentic)

(d) Harmony (All I and V_7)

(e) Fingering (Start on 3-use thumb of L.H. for D in Measure 12)

Also, sing the pitches by letter-name. (See enclosed sheet).

Objectives for Lesson No. 15

1. Reviewing minor patterns and chords.
2. Harmonizing a new minor song.
3. Sightreading a famous symphony theme.
4. Identifying form, cadences, nonharmonic tones.

Lesson No. 16

1. Introduce the IV chord through playing Lavender's Blue, p. 51 in Piano for Classroom Music (Pace). Ask the children while playing the song second time to raise their hands when they hear a chord that is not I or V_7 (measures 3 & 4, 11 & 12). Notate the 1st phrase on the board and have children discover that the melody tone in measures 3 & 4 does not belong to either I or V. Another chord is needed. I, IV, and V are called the primary chords in music, and are the most used chords. Explain that IV is built on the 4th degree of the scale in 3rds. To make it easy for us to play, we rearrange tones and play it in what is called an inversion. In this key (D), IV is spelled G-B-D in root position. For easier playing we move the top note D to the bottom, since 5th finger is playing that note already in I chord. Practice playing I IV I in D and other keys. Note that in proceeding to IV from I, the following rules

$$\begin{array}{cccc} & I & IV & I \\ & 1 & 1 & 1 \\ L.H. & 3 & 2 & 3 \\ & 5 & 1 & 5 \end{array}$$

should be observed for L.H.: 5 stays on same note, put 2 down in 5 finger pattern and thumb moves up one whole step. This piece does not stay in 5 finger position. In measures 3 and 4, the 5th finger is playing on the 6th degree of the scale. This is the 1st extension which has been introduced, and it's important to get across the concept that not all pieces stay in 5 finger position.

2. Aural Work: Pick out by ear the measures where IV is used in the following songs played by the teacher: A. Jimmie Crack Corn (chorus), B. O Susanna (chorus), C. On Top of Old Smoky, D. Auld Lang Syne.

3. Drill: In keys of C, F, G, D I IV I
I IV V_7 I

Note: IV is played in $^6_4$ position (2nd inversion). If the children merely understand that tones of a chord can be rearranged without the letter names of the chord changing, and that this is called inversion, that is all that we desire. No further explanation is necessary.

Objectives for Lesson No. 16

1. Know how the IV chord is built.
2. Know that chords may be inverted (tones are rearranged).
3. Hear a IV chord in many familiar songs.
4. Play a phrase which goes out of 5 finger position.
5. Play IV - I; IV-V_7-I in several keys.

Lesson No. 17

1. Use these patterns to establish a key (a) 5 finger pattern, (b) tetrachord scale, (c) progression of I-IV-V_7-I. Usually used when learning new songs.

2. Teacher plays the Bear Went Over the Mountain in G from p. 51-52 of Piano for Classroom Music by Pace. One or two students should be at the board jotting down the chord symbols for each measure for at least the first half of the song. After this is correct, the class can sing, or teacher play the melody while those at their keyboards and a few at the piano harmonize the song.

3. Aural Work: The teacher or students play several progressions made up from the chords I IV and V_7, and the class identifies the progression correctly. Example: I IV I; I V_7 I; I V_7 I; IV V_7 I. Use several keys and avoid progressing from V to IV. Keys like B^b, E^b, A, etc. should now be tried.

Objectives for Lesson No. 17

1. Establish a pattern to set up tonality.
2. Identify the harmony to The Bear Went Over the Mountain.
3. Hear chord progressions accurately or at least better.

Lesson No. 18

1. Have Alouette either on sheets or on the board for the class to learn. The following aspects of the score should be discussed before beginning:

   (a) What makes the R.H. melody easy? (5 FP)
   (b) What is the harmony? (I and V_7)
   (c) What kind of playing do we have in measures 5 and 6? (Unison)
   (d) What does D. C. al fine mean (go back to beginning and play to fine).

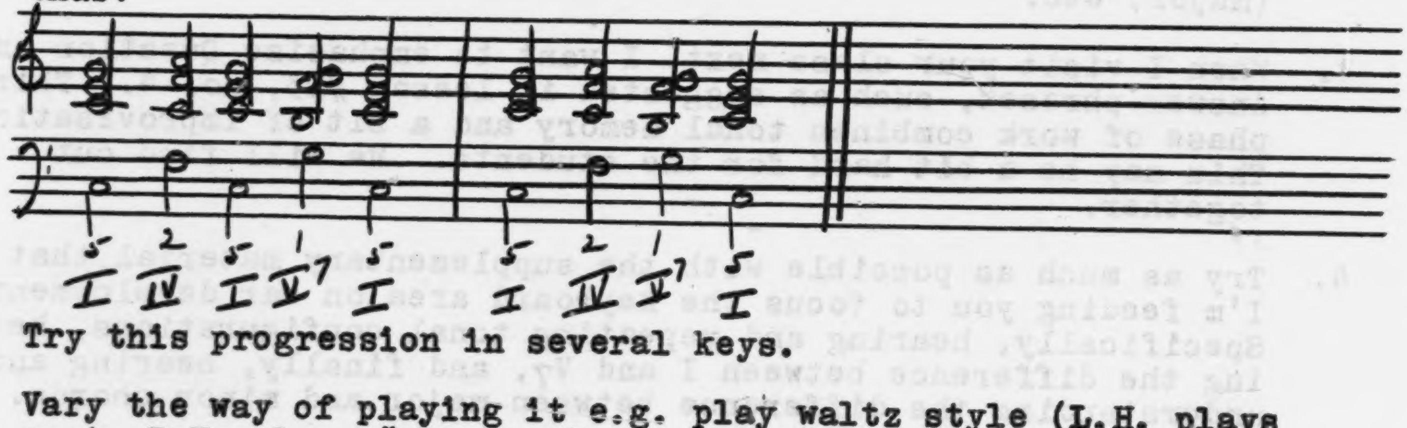
2. Review playing I IV in L.H. Now play this progression in the R.H. Fingering which is most suitable follows:

   I IV I
   5 5 5
   3 3 3
   1 1 1

   (a) Practice playing in the R.H. in several keys.
   (b) Then try I IV I V_7 I and I IV V_7 I
   (c) Now play the roots to the chords in the above two progressions in the L.H. thus:

   I IV I V_7 I and I IV V_7 I
   5 2 5 1 5 5 2 1 5

   Then add the R.H. so that L.H. plays roots and R.H. plays 3 note chords (4 voices altogether) thus:



Try this progression in several keys.

Vary the way of playing it e.g. play waltz style (L.H. plays root, R.H. plays "pah-pah," or play L.H. followed by R.H.

Objectives for Lesson No. 18

1. Learning a new piece from notation (Alouette).
2. Understanding some simple musical terms like D. C. al fine.
3. Playing in unison, which happens frequently in music.
4. Chording with roots in L.H. and chord in R.H.
5. Understanding that chords can be spread out, and tones doubled.
6. Varying chordal patterns-waltz, etc.

SUPPLEMENTARY MATERIAL

KEYBOARD PLANS - AURAL EMPHASIS

1. On attached ditto you will find more tonal configurations to use in class. These are common patterns found in elementary song series. They can be used in games, and should be played at least twice before the student attempts to repeat each pattern.

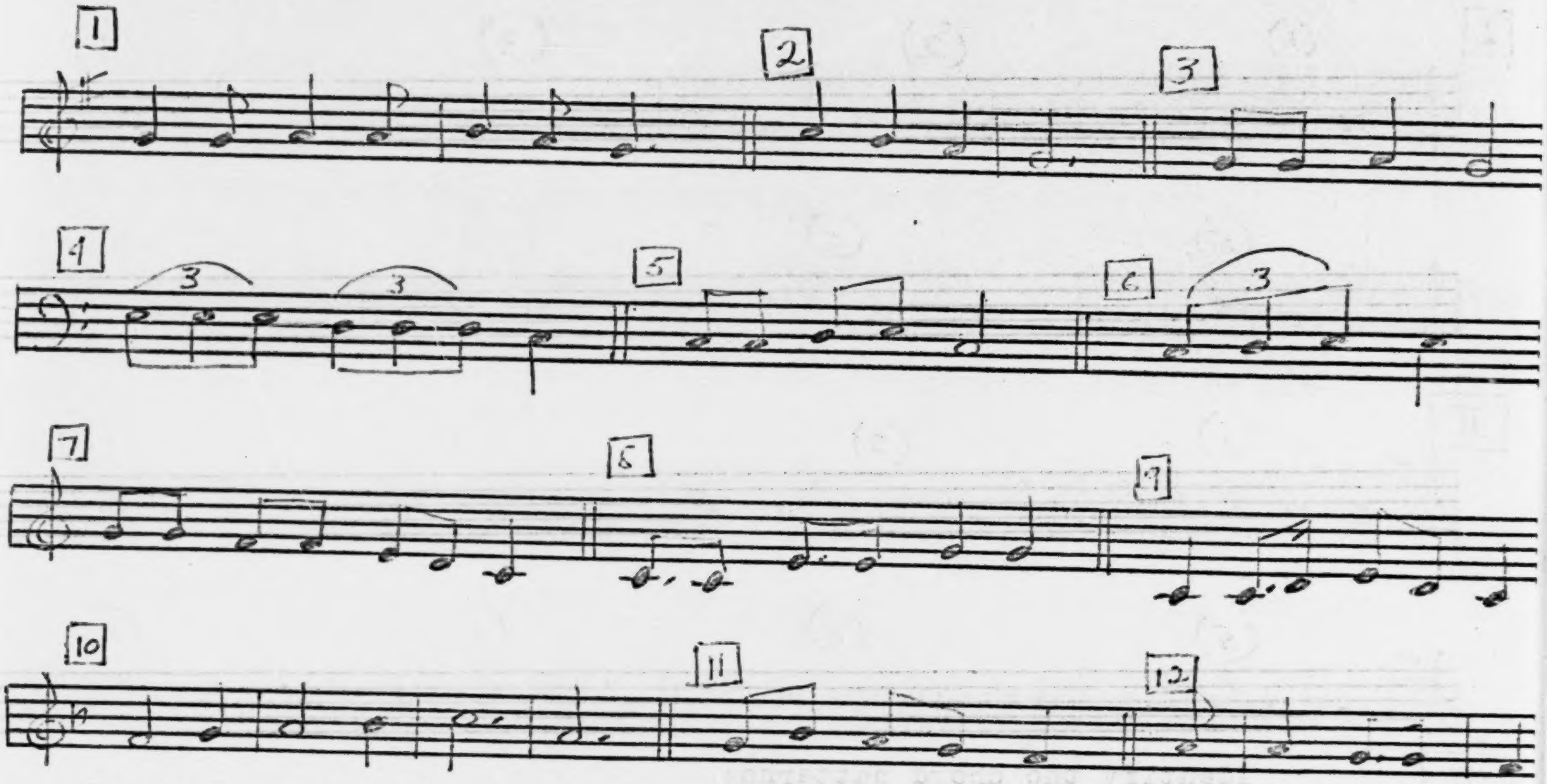
   After the children have a good deal of experience in repeating patterns for you, you might have them make up some for their classmates. Warn them to keep their own patterns simple, so that the other children trying to play them back do not experience a lot of difficulty.

2. Skip in the plans to lesson #14 and introduce minor keys. Drill on hearing and seeing (also feeling) the difference between major and minor chords. In lesson #14 under #2, (Aural Work), songs in minor which should be fairly familiar to the class are suggested. You should play several of these and mix them up with major songs (from their fifth grade song book). Have them identify the mode (major or minor). Example: When Johnnie Comes Marching Home (minor), Jimmie Crack Corn (major) etc.

3. When I visit your class next, I want to emphasize Question and Answer phrases, such as suggested in lesson #13, no. 4. This phase of work combines tonal memory and a bit of improvisation. This may be a bit hard for the students. We will find out together.

4. Try as much as possible with the supplementary material that I'm feeding you to focus the keyboard area on ear development. Specifically, hearing and repeating tonal configurations, hearing the difference between I and V_7, and finally, hearing and understanding the difference between major and minor chords.

Tonal Patterns for Keyboard


1
2
3
4
3
3
5
6
3
7
8
9
10
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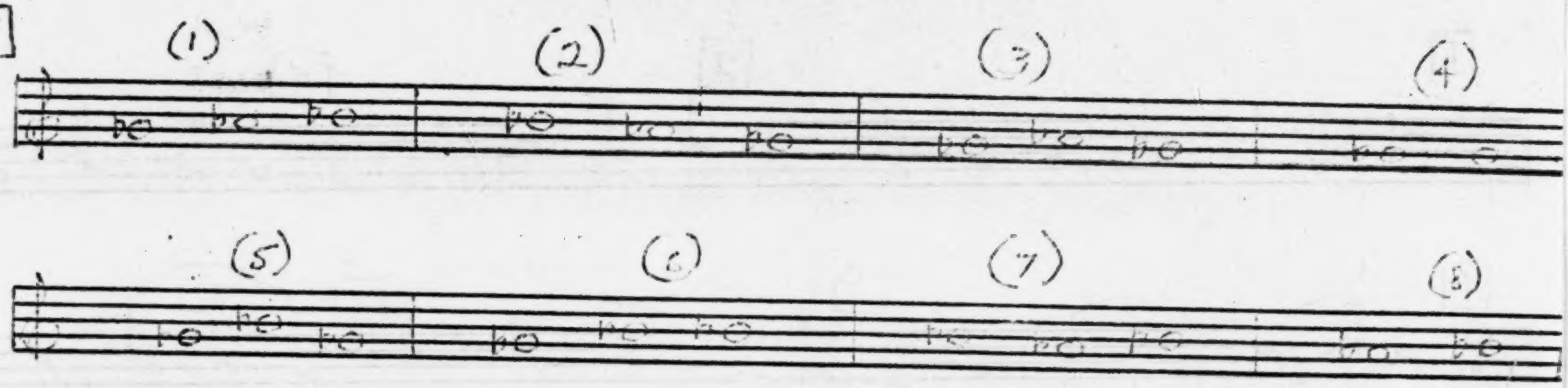
12

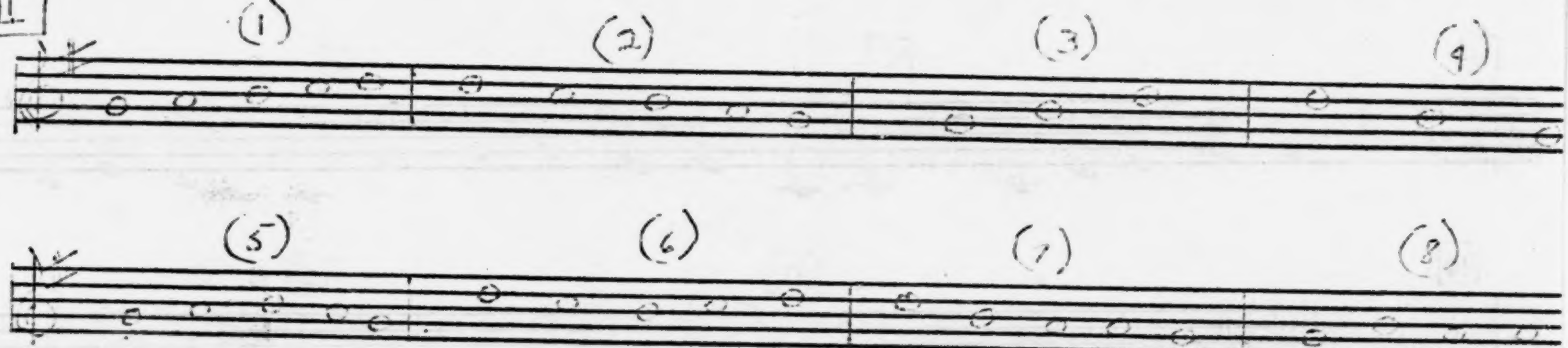
Teacher: Play each pattern twice for the children before they attempt a repeat.

Keyboard - Patterns to Play Back - Teacher's Copy

I

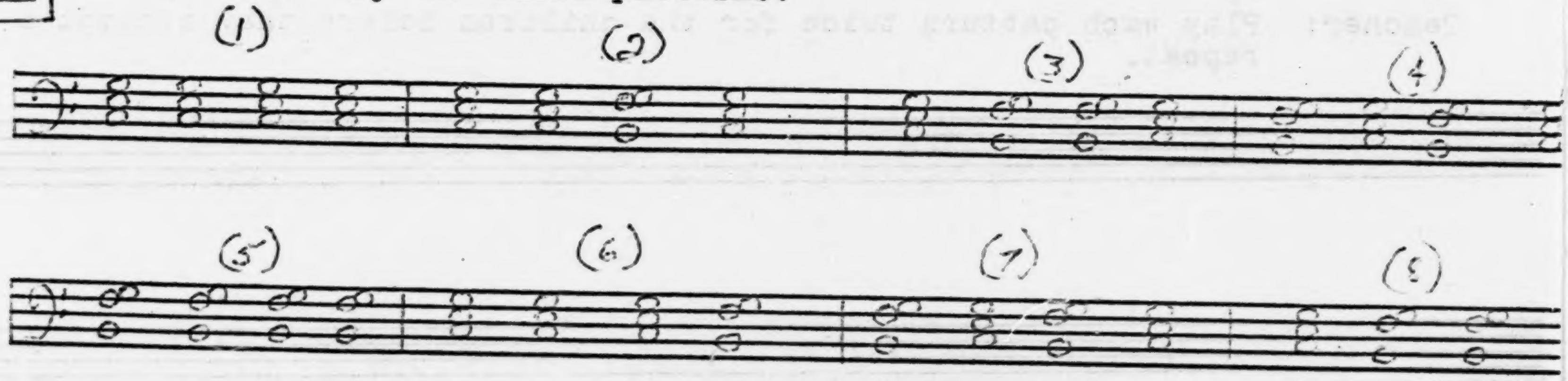


II



III

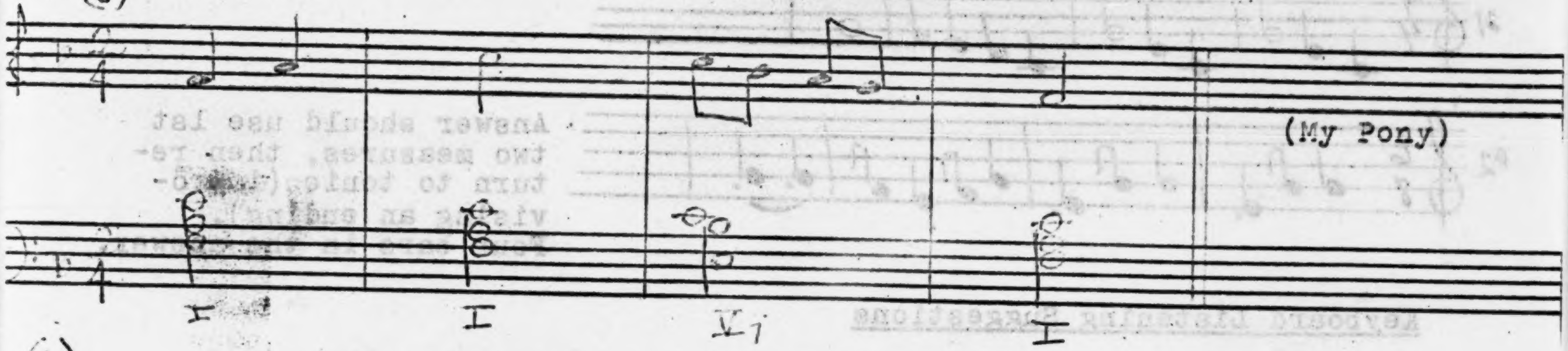
Identify the chord patterns:



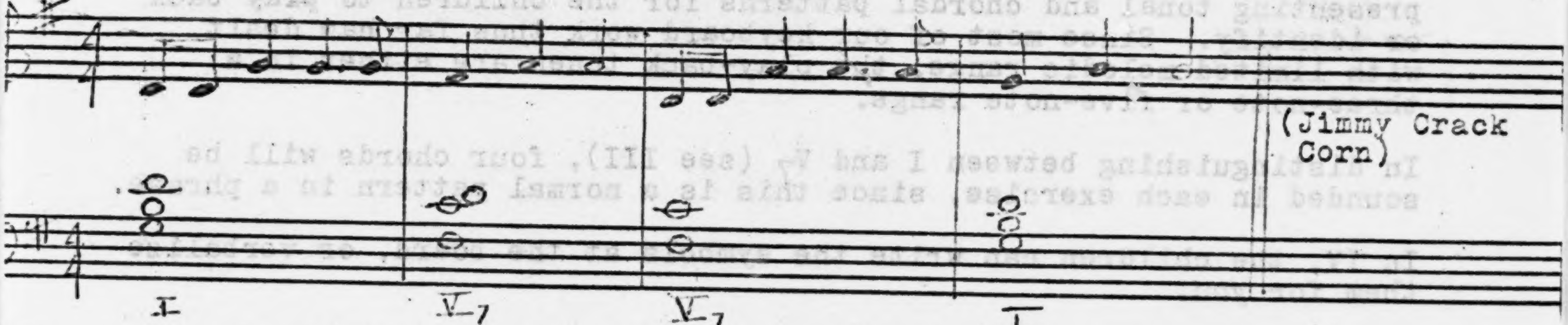
Identify by ear the chords in these songs: (fragments)

IV

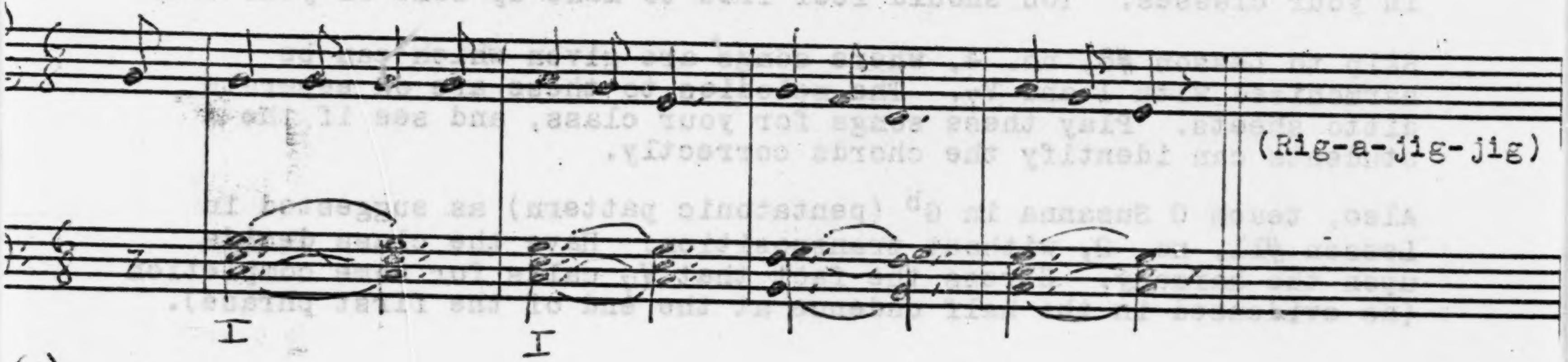
(a)


(My Pony)
I
I
V7
I

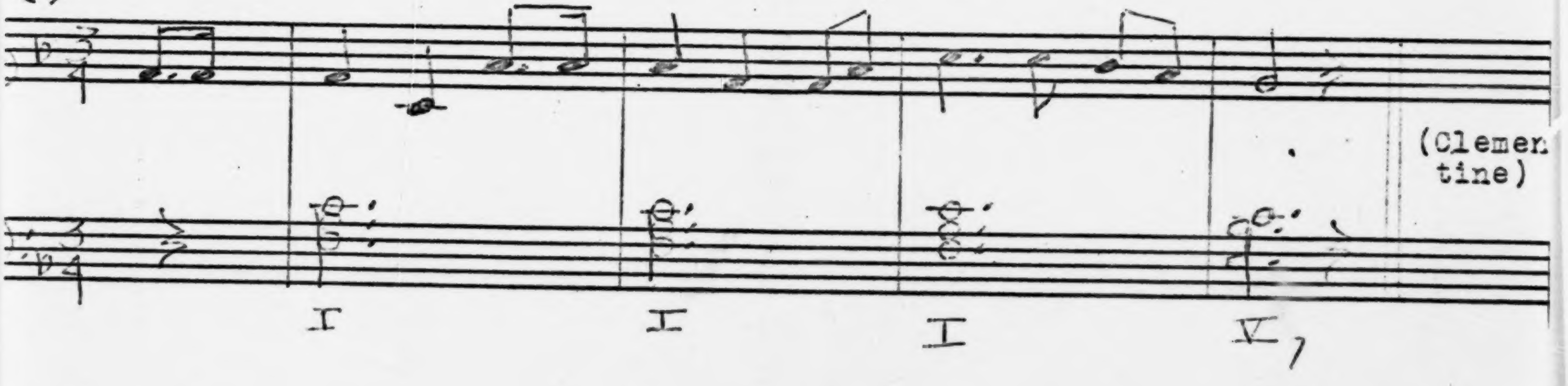
(b)


(Jimmy Crack Corn)
I
V7
V7
I

(c)

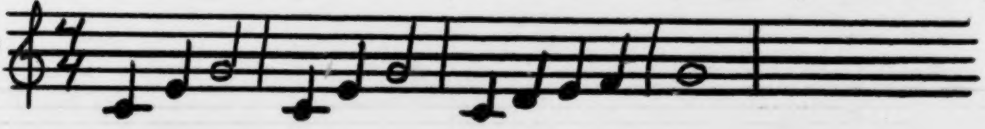

(Rig-a-jig-jig)
I
I

(d)

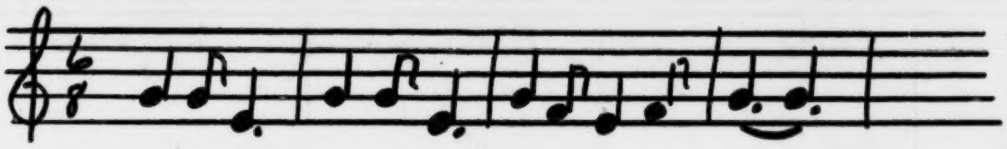

(Clementine)
I
I
I
V7

5. Sample Question Phrases: (make your own patterned after these)

#1



#2



Answer should use 1st two measures, then return to tonic (improvising an ending). Four bars in the answer.

Keyboard Listening Suggestions

On separate ditto sheets you will find suggestions and ideas for presenting tonal and chordal patterns for the children to play back or identify. Since most of our keyboard work thus far has dealt with limited melodic range, the play-back tunes are either in a three-note or five-note range.

In distinguishing between I and V_7 (see III), four chords will be sounded in each exercise, since this is a normal pattern in a phrase.

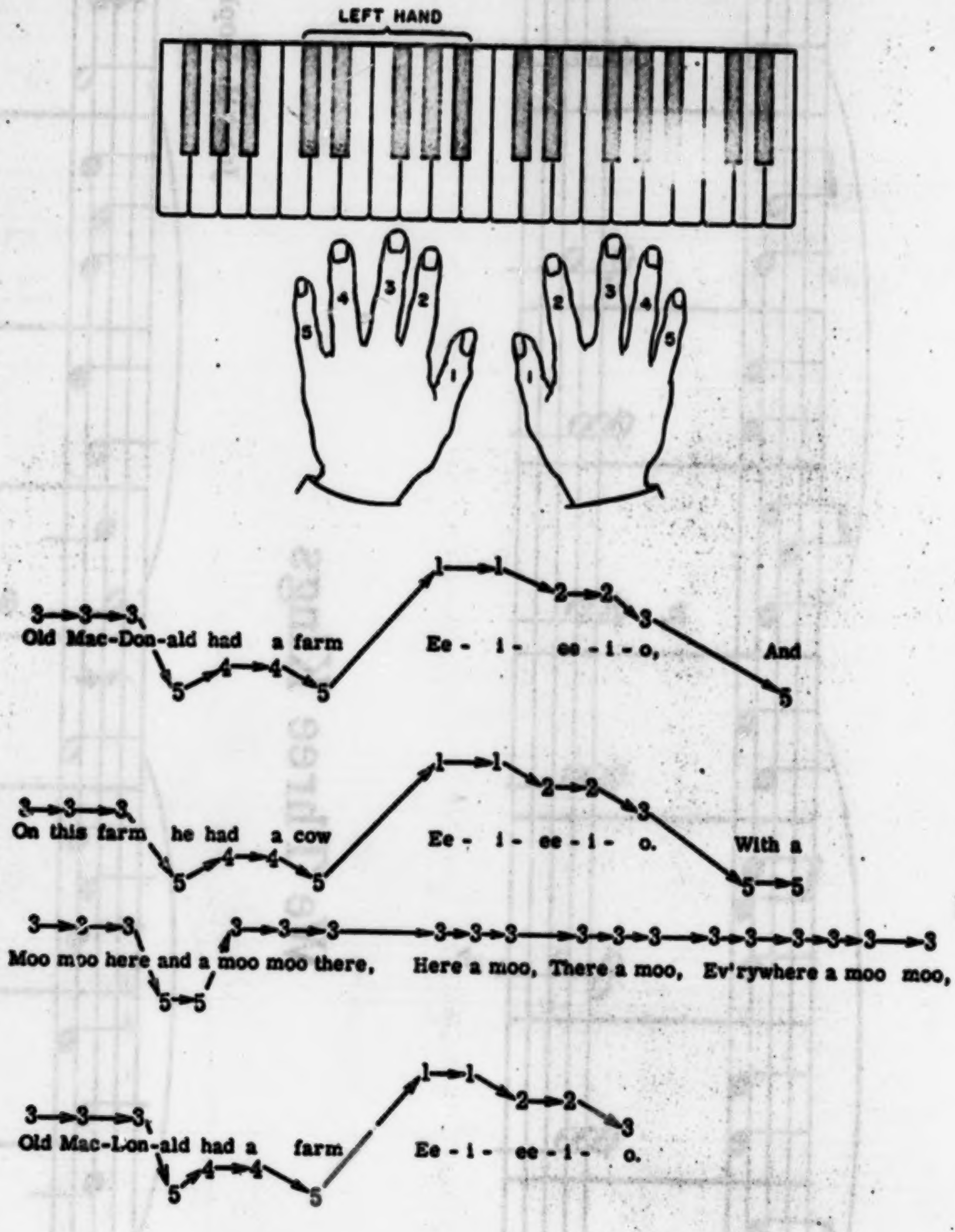
In IV, the children can write the symbols at the board, or verbalize them for you.

These patterns are similar to the ones demonstrated recently in your classes. You should feel free to make up some of your own.

Skip to Lesson #8, no. 4, where songs are given which can be harmonized with I and V_7. The melodies to these are on separate ditto sheets. Play these songs for your class, and see if the students can identify the chords correctly.

Also, teach O Susanna in G^b (pentatonic pattern) as suggested in Lesson #11, no. 2, without transposition. Have the class decide upon the harmony. Stress the fact that V_7 calls for some completion (as evidenced in the half cadence at the end of the first phrase).

OLD MAC DONALD

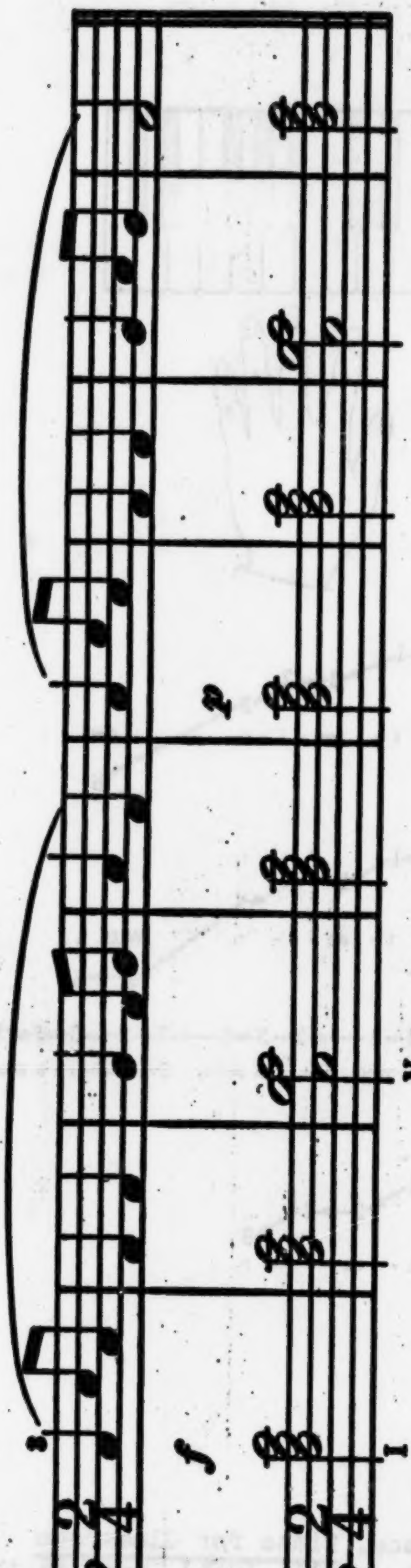

LEFT HAND
5 4 3 2 1
1 2 3 4 5
3→3→3→5→4→4→5→1→1→2→2→3→5
Old Mac-Don-ald had a farm Ee - i - ee - i - o, And
3→3→3→5→4→4→5→1→1→2→2→3→5→5
On this farm he had a cow Ee - i - ee - i - o. With a
3→3→3→5→5→3→3→3→3→3→3→3→3→3→3→3→3→3→3→3→3
Moo moo here and a moo moo there, Here a moo, There a moo, Ev'rywhere a moo moo,
3→3→3→5→4→4→5→1→1→2→2→3
Old Mac-Don-ald had a farm Ee - i - ee - i - o.

A sample of the material from Pace, *Piano for Classroom Music*, (Englewood Cliffe; Prentice-Hall, 1956), used in the keyboard sections.

A sample of simple two hand songs furnished students near of nine week period.

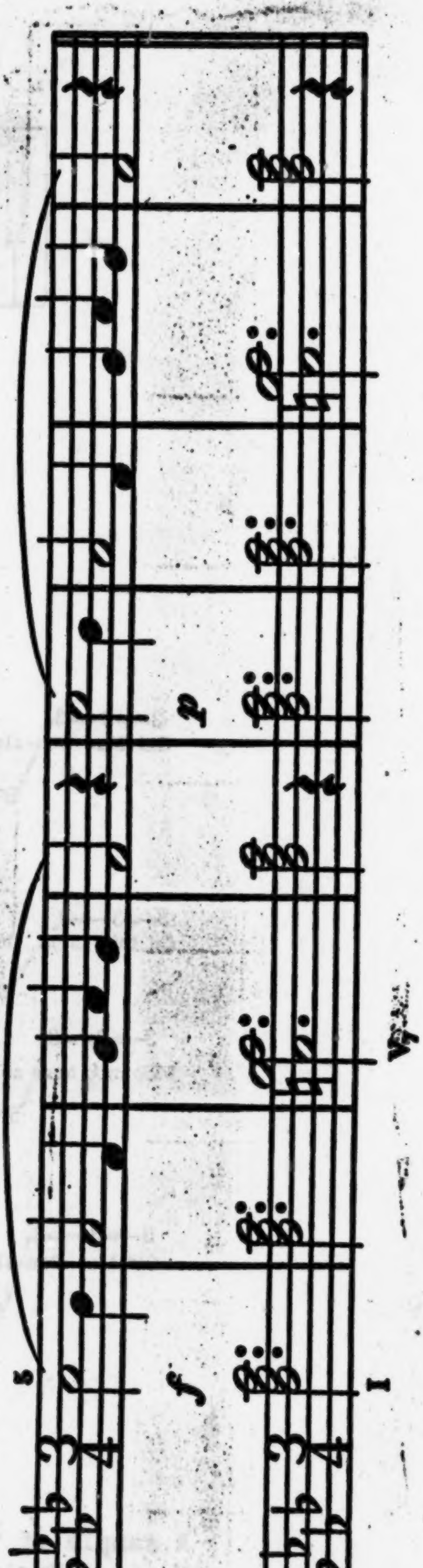
Independent reading

English Folk Song



We Three Kings

John H. Hopkins



AURAL SKILLS - SIGHT READING - NOTATION

Program Objectives

Hopefully, at the end of nine weeks the student will be able to -

1. Read and sing common tonal configurations from notation.
2. Hear and identify common tonal configurations aurally.
3. Identify the lines and spaces by letter name.
4. Vocally chord the I-IV-V chords from memory and/or notation.
5. Hear and identify the I-IV-V chords from a sound source.
6. Recognize (identify) common tonal configurations in familiar songs.
7. Clap and sing basic rhythmic patterns from notation.
8. Clap and identify basic metric patterns.
9. Use sol-fa syllables, numbers and letter names in singing common tonal configurations.
10. Recognize and sing the key tone when hearing familiar songs.
11. Use basic musical symbols to write or copy simple music.
12. Follow a simple, one line score for listening.

The following suggestions are stolen from Leonhard's Foundations and Principles of Music Education

1. Start with familiar songs and extract from them.
2. Sing and play by ear and relate to the score.
3. Move to the beat of the music.
4. Stress patterns (configurations) not single tones.
5. Use instruments to illustrate tonal relationships.
6. Emphasize improvisation.
7. Use vocal chording of the I-IV and V_7 chords.
8. Set up tonality for each song by singing I-IV-V_7-I chord progression.
9. Experience with music should precede use of notation.
10. Use real music for the most part.
11. Stress understanding, not rote memorization.
12. Bring in as many outside experiences as feasible.
13. Use scores to enhance listening.
14. Stress the advantages of reading music.
15. Use lots of easy music. Always establish tonality and beat before reading. Solve tonal problems by clarifying the relationship between the configuration and the tonality. Solve rhythmic problems by clarifying the relationship between the rhythmic pattern and the beat.
16. Use chordal accompaniment to help maintain the tonality and the beat.
17. Analyze music to locate configurations.
18. Allow for individual differences.
19. Don't become obsessed with music reading. Mild panic is sufficient.

The following activities are suggestions only. Other more pertinent, more enjoyable or more practical activities may come to mind, and if so, feel free to use them.

1. Sing exercises with syllables, numbers and note names.
2. Write exercises from dictation.
3. Sing tonal configurations with note names, syllables and numbers.
4. Write configurations from dictation.
5. Copy music to learn how to use musical symbols.
6. Sing familiar songs with words, numbers, syllables and note names.
7. Find configurations in familiar songs.
8. Use competition to stimulate interest: e.g. a configuration spell down.
9. Read configurations in retrograde to emphasize their pattern relationships.
10. Improvise rhythms, using clapping, finger snapping, knee slapping and foot tapping.
11. Compose "songs" by combining configurations.
12. "Compose" songs by notating telephone numbers: e.g. 1,2,3, equals C,D,E.
13. Sing songs in hocket, i.e. divide melody among several singers, each one singing one note or each one singing a tone in sequence.
14. Sing configurations in hocket.
15. Play configurations on the piano.
16. Identify tunes by hearing their first few measures. "mystery tunes."
17. Identify tunes by silently studying and comparing notation.
18. Finish the notation for incomplete familiar tunes.
19. Sing tunes as they are pointed out from scale notation by the teacher. (i.e., major scale notated on blackboard, tones indicated in tune's sequence.)
20. Use gestures or hand movements to symbolize tonal levels - pitch and dynamics.
21. Pantomine stepwise configurations. Musical charades?
22. Build key feeling by vocal chording of I-IV-V-I. e.g. C-E-G-E-C F-A-C-A-F G-B-D-B-G C-E-G-E-C. Start with neutral syllable, progress through numbers, note names and syllables in key of C, initially.
23. Use configuration flash cards for speed contests - competition.
24. Use individual and small group singing for testing and motivation.
25. Clap, snap, tap, and slap basic meters and rhythms. Ask yourself what Carl Orff would do.
26. Identify rhythmic patterns through listening.
27. Conduct basic metric patterns: 2/4 3/4 4/4.

SUGGESTED SONGS FROM SONG SERIES

Regarding writing and note reading, the following quotation from *Teaching Musicianship* by Howard Murphy: "Here is a known tool which will unlock the structure of music. Begin with the examination of simple music in the key of C major--or transposed to it--and continue using only that key until the student has sufficient *musical* background to assimilate other keys." p. 21

The following songs from the common song series are in the key of C. (Book 5)

SILVER BURDETT: 5, 12, 14, 15, 16, 18, 19, 23, 32, 44, 53, 55, 62, 63, 66, 76, 90, 96, 100, 111, 114, 127, 132, 138, 141, 144, 147, 154, 160, 164, 164, 173, 174, 180, 181, 196, 208, 211, 214.

ALLYN & BACON: 10, 12, 16, 22, 24, 27, 37, 40, 66, 72, 83, 84, 85, 98, 110, 125, 126, 144, 145, 152, 153, 157, 160, 163, 164, 166, 169, 172, 176, 179, 186, 188, 189, 195, 196.

GINN: 18, 19, 22, 23, 38, 49, 54, 55, 59, 61, 83, 85, 94, 113, 128, 136, 140, 143, 145, 154, 178, 188, 189, 190, 204, 205, 206.

ABC: 2, 18, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 77, 82, 84, 142, 155, 161, 163, 174, 176, 180, 194.

FOLLETT: 10, 13, 28, 29, 41, 80, 83, 85, 106, 110, 112, 115, 118, 119, 153, 161, 162, 164.

Because of the variety of song series in use in your schools, the lesson plans will seldom specify songs from a particular song series. However, this is not meant to imply that the song series books should not be used. In fact, the lesson plans should usually allow some free time during each period for regular song singing from the books. Preferably these songs should be used in a similar manner to the regular, or assigned material. For instance, activities such as these might be appropriate:

1. Singing with words, numbers and letters.
2. Clapping rhythms.
3. Finding tonal patterns (configurations) in songs.
4. Analyzing symbols, musical elements found in these songs.
5. Silent reading of small sections of songs.
6. Identifying errors intentionally added to the songs by the teacher.
7. Playing songs on the piano or on other instruments if available.

Lesson Plans - Aural Skills

Lesson one

Teacher materials: chalk, music staff liner, chalkboard
Student materials: none
ASSIGNMENT: BUY SMALL BOOK OF MUSIC PAPER (EACH STUDENT)
Objectives:

1. Derive note names and numbers from a familiar song.
2. Begin learning note names of the C major scale.
3. Begin learning the elements of notation:
    a. staff
    b. treble clef sign
    c. leger lines
    d. shape of note heads

Activities:

1. Sing "Are You Sleeping" with words.
2. Sing C major scale - observe notation, use numbers.
3. Derive scale tone numbers from "Are You Sleeping." Sing.
4. Sing C major scale with letter names. (explain alphabet direction and pitch direction relationship.)
5. Derive letter names for "Are You Sleeping."
6. Have students point out notes of song from scale pattern on chalkboard.
7. Sing song as a round.
8. Explain basic notation symbols (obj. e).

Definite and Measurable Objectives on Aural #1

1. Learn notation mechanics--staff, treble clef sign, leger line, note values, quarter and half in 2/4 meter (although explanation of 2/4 meter need not come until lesson 2.

2. Point out if Are You Sleeping moves scalewise or skipwise and where.

3. Point out if a C major scale moves scalewise or skipwise. Would like to have them understand the functional role of the scale. I suggested in lesson 11 last quarter that they should be able to write one but I realize now that this is really meaningless. Some students didn't know how to put stems on but this isn't terribly important for understanding. Some got off and either skipped a note or put two on one line or space and so invariably ended up one off. They certainly didn't understand the musical use of the scale. However, those that did write it correctly may only have better, more careful, work habits or better eyesight in getting 8 notes down and having them on every line and space and I still don't know if they know much more than the others.

4. Ability to name names of notes for music as indicated in activity 6.

5. Have students discover by ear identical phrases in Are You Sleeping--are they identical in notes and rhythm?

6. Learn where end of phrase comes so students know when to breathe in singing the number. This concept may be without understanding at this point but we need to get started.

Lesson Two

Teacher materials: same as lesson one, plus dittoed exercises.
Student materials: none

Objectives:
1. Derive note names and numbers from a familiar song.
2. Review C scale with note names and numbers.
3. Introduce vocal chording of the I and V chord.
4. Introduce 2/4 and 3/4 meter.

Activities:

1. Sing America with words.
2. Derive letter names and numbers for America.
3. Sing America with letters and numbers.
4. Sing exercise #1 (see manuscript) with numbers and letter names.
5. Explain 2/4 meter.
6. Sing exercise #2.
7. Explain 3/4 meter. Clap 2/4 and 3/4 meter.
8. Learn I and V chords by ear. Sing and play 1-3-5-3-1 and 5-7-2-7-5 using neutral syllable. Practice. Work toward goal of being able to hear or sing either chord from hand or notational symbols.

Assignment: none.

Definite and Measurable Objectives on Aural #2

1. Know meaning of meter signs 2/4 and 3/4.

2. Be able to clap quarter notes in 2/4 and 3/4 with accent.

3. Be able to determine meter (2/4 or 3/4) of some familiar songs (mystery tunes) from hearing them and others just by thinking how they go. Thus they can name some songs or select from a list on the board songs that are in 2/4 or 3/4.

4. Know and write a I chord and a V chord at least in C. If you can use other keys without mixing too many up--FINE.

5. Be able to recognize I chord and V chord when heard. This means stressing retention of the sound of I at all times.

6. Be able to sing America by letter name, syllable or number by going around the room one note per student.

7. Be able to sing exercises #1 and 2 by going around the room (letter name, syllable or number) one note per student. Students must put in accents in proper places so even these exercises are done as musically as possible.

8. Be able to stop at any point and have student sing the home tone, either in America or in exercises 1 and 2.

Lesson Three

Teacher materials: dittoed exercises and "mystery tunes."
Student materials: music paper (make their own if not purchased yet.)

Objectives:

1. Review C scale pattern with numbers and note names.
2. Review I and V chords.
3. Identify mystery tune.
4. Sing mystery tune with words, numbers and letter names.
5. Review meters and learn 4/4 meter.

Activities:

1. Sing exercises 1,2,3,4.
2. Sing songs beginning with I chord: Marines Hymn, Star Spangled Banner, Dixie, or others. (You may have special preferences from your song books. . . if so, there is no need to be bound by lesson plan suggestions.)
3. Note chordal shape of opening measure of these songs.
4. Sing I and V chords. Relate to songs above. (I chord only).
5. Practice vocal chording and identifying I and V from listening.
6. Notate mystery tune #8 and ask class to sing inwardly. Each person should write down the answer, or the song title he thinks is correct. Have various students sing the melody as they think it goes. Compare, discuss and then give correct answer.
7. Complete notation of mystery tune with help of class.
8. Clap 2/4 3/4 and 4/4. Create chythmic (metric) patterns using clapping, finger snapping, knee slapping and foot tapping. WILD.

Assignment: Copy the music of a song chosen by the teacher from the song book in use.

Lesson Four

Teacher materials: dittoed manuscript tunes and exercises, staff liner, chalk, piano.
Student materials: song books, music paper.

Objectives:

1. Derive note names and numbers from a familiar song.
2. Identify a tune by ear.
3. Identify a tune by sight, from notation.
4. Review scale letters and numbers in rhythms.
5. Continue developing skills in notation.
6. Develop feeling for meter and rhythm in 3/4.
7. Recognize a tonal pattern in a fmailiar song.
8. Review and test vocal chording of I and V.
9. Evaluate progress in copying music.

Activities:

1. Sing "Twinkle Twinkle Little Star" with "la," numbers and letter names.
2. Identify mystery tune #15 by ear.
3. Identify mystery tune #3 by sight. Students should sing silently, write down their answer and be ready to sing the tune they have in mind, when called upon.
4. Sing exercises 1,2,3,4,5,6 with numbers and letter names.
5. Practice vocal chording of I and V. (still using "la").
6. Clap rhythms of #3 and #6. Divide class in half and combine the two rhythms. Reverse patterns and repeat procedure.
7. Identify configuration #20 in the song "Twinkle Twinkle."
8. Discuss problems found copying song assigned in lesson three.

Definite and Measurable Objectives on Aural 3 and 4

1. Improving tonal memory for a melody through attention to the characteristics of a melody. At this point they should be able

to recognize two different melodies as different, two melodies exactly alike even though in a different key as the same. Future lessons will allow for changing of notes or rhythm in melody and for changing of harmony in a melody with the student recognizing whether it is the same or different (even if he can't tell why). You may want to start this activity now if what is prescribed is too simple.
2. Define and recognize a phrase.
3. Find phases either through words to a song or through music.
4. Know 4/4 time.
5. Be able to recognize the meter of a song when heard.
6. Know where the strong beats occur in a measure.
7. There are some unmeasurable objectives but extremely important ones in this singing back of melodies, being able to tell the melody from the accompaniment, seeing similarities to help remember what it sounded like, closely looking at a melody, range, tessitura, scalewise, chordwise, skipwise, repeated rhythms and so on. Hopefully they will also develop some feeling for a phrase, how to sing one, what expression is appropriate, the nuances, etc. as well as some feeling for meter in a meaningful way from the music.

Lesson Five

Reference to Song Books is always to those songs in C.

1. If you need more time on lessons 3 and 4 and the students are not bored--STOP right here, read no more, do not pass Go, do not collect...etc.

2. Review time on music mechanics. Admittedly the first lessons covered these with little more than passing fancy but they are important. Take time to ensure that students know the names of lines and spaces, notes, note values, bar lines, rests, treble clef signs, accidental signs (sharp and flat), scale, leger line and time signature. Can point all of these things out in music so they make sense, derive this information in a "gamey fashion" from familiar songs or better ways that you know about. I think we would prefer this to be context initially and put on the board separately later. Desire these items to be testable rather than detestable.

3. At this point students should have copying assignments in their music notebooks. Copying is probably the best way to learn all of this factual stuff--teaching it all in class would probably be very inefficient. This can be integrated with lots of other good things in life like:
   Take your songbooks home, write out ten different phrases for tomorrow.
   Take your songbooks home, write out the melodies of ten different songs.
   Take your songbooks home, write out the rhythm of ten songs but do it all on a single pitch, say first line F or any other note.

Take your songbooks home, write out the home tone for ten different songs.
Take your songbooks home, write out the melodies of ten songs that have a major chord (triad or whatever you call it) as part of the melody (Example: Star Spangled Banner)--can do this with scalewise etc.
Etc. Etc. Etc. You know what is best procedurally, whether certain songs should be assigned or have free choice as suggested above.

4. Time to get out the songbooks, pitchpipes and become autocratic with a completely Silent classroom. Songs in songbooks are about to become the mystery songs from last nine weeks. Pick a song, give them the starting pitch only and have each and every student sing the song through to himself silently, inwardly, without sound of humming, whistling, tapping. (We realize they all can't do this as yet but that's why it is part of the lesson). Now you play three songs from the songbook on the piano and have them...meaning one individual called upon...identify which of the three songs he has just sung inwardly to himself. If this goes very well and students begin to catch on what to listen for, meter, rhythm, pitch, any number of things can give it away...GREAT. We can then begin to shorten the examples and give shorter melodic or rhythmic patterns to identify. Your Christmas mail will bring some exercises to do after they have mastered the complete song bit.

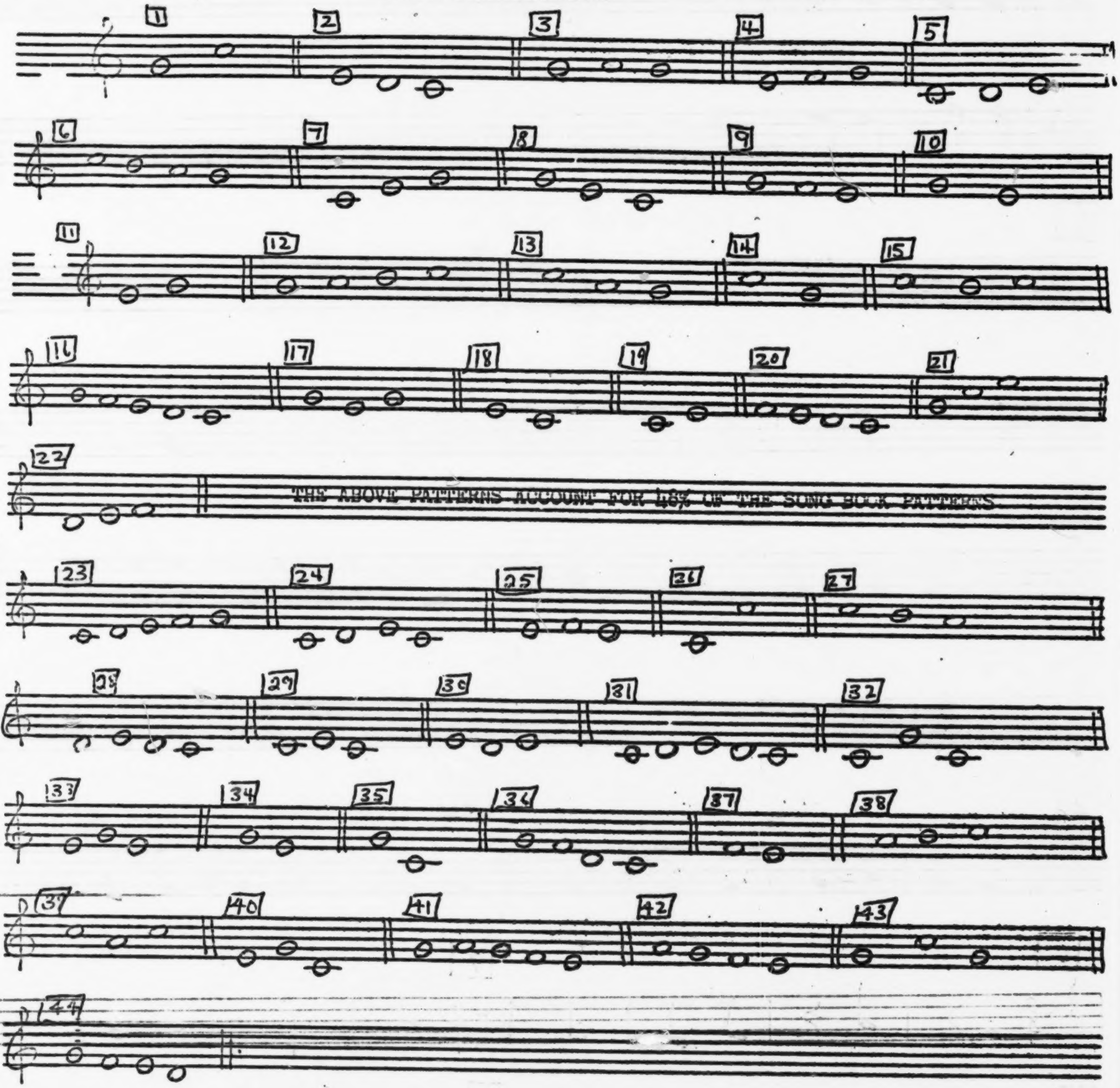
5. Vocal chording. Fun. But point out to them in music how often the chord appears in melodies so this will increase tonal memory. Emphasize roots. Stop class at any time during vocal chording and have them sing do. Have individuals sing I chord on various pitches as you give them from the piano. Go on to IV and V chords as they become proficient.

6. Reading and Dictation Exercises. Use either the sheet from 1st nine weeks or 2nd nine weeks. Only practice and drill on every other exercise. Use the others for sight reading by individuals or cells. We prefer that students learn principles of scale and skip rather than a repertoire of 48 ditties. As Gretchen pointed out these principles are still meaningless until we add the principle of more than one key. We agree with her. Reading is not our primary objective although the lessons plans for the first nine weeks certainly make it appear so. We are concerned with the principles within one key so they can sight sing or make sense out of it when sung inwardly, recognize errors when different from that played etc. However you will notea few exercises on the new sheet in two different keys. When students sing these use any key you wish that is best for the student, we picked F and G as they are two good keys to see and not necessarily good to sing in.

Definite and Measurable Objectives for Lesson # 5

1. Know mechanics of music, names of lines, spaces, notes, note values, rests, etc.

TONAL CONFIGURATIONS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THE ABOVE PATTERNS ACCOUNT FOR 48% OF THE SONG BOOK PATTERNS

THE TONAL CONFIGURATIONS SHOWN ABOVE ARE THOSE FOUND MOST FREQUENTLY IN AN ANALYSIS OF 326 SONGS, CHOSEN RANDOMLY, FROM 18 song texts USED COMMONLY IN GRADES THREE TO SIX. SONGS IN MINOR KEYS WERE NOT INCLUDED IN THE STUDY, NOR WERE CHROMATIC PASSAGES OR PASSAGES FROM TRANSITIONS. THESE CONFIGURATIONS COULD, OF COURSE, APPEAR IN ALL MAJOR KEYS.

G. Schirmer Inc. New York 18 Staves No. 5 - Printed in the U. S. A.

Reading and Dictation Exercises--Revised*

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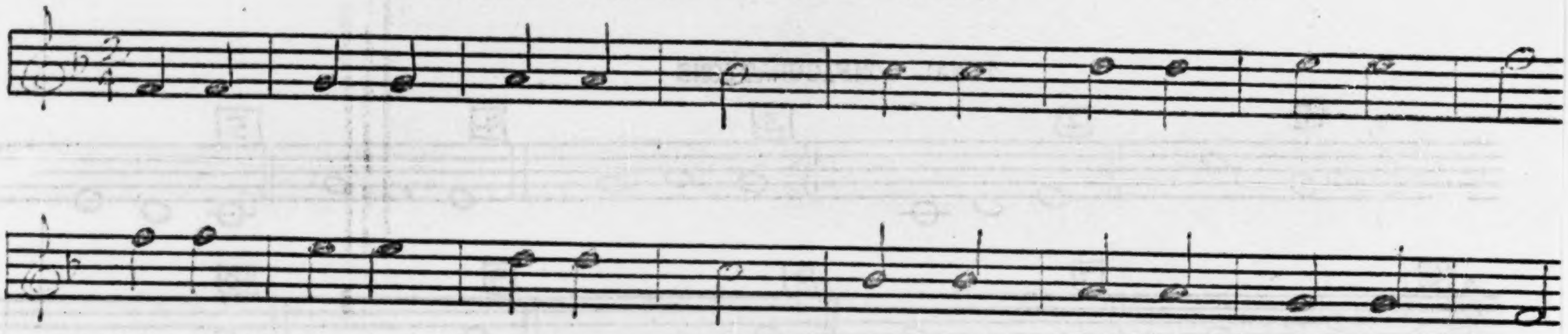

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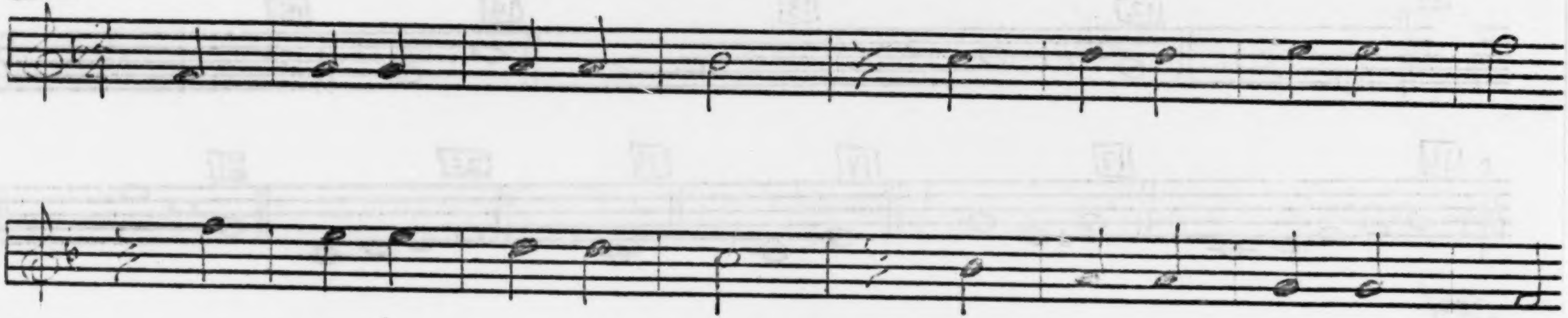

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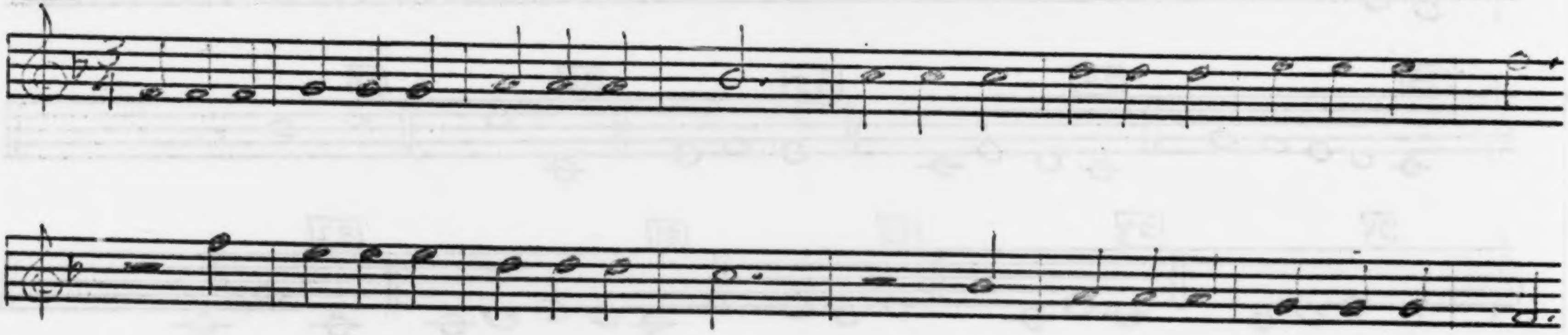

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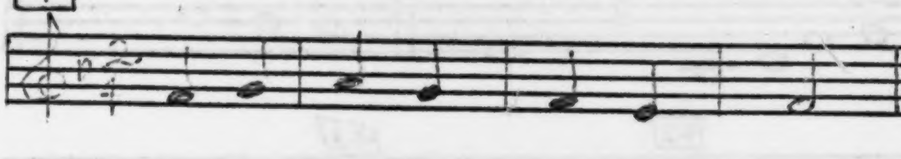

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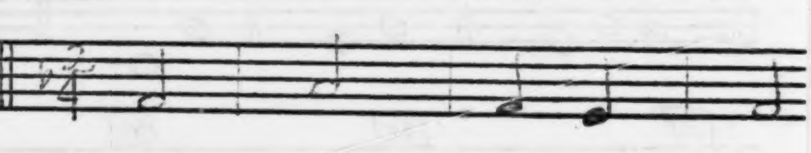

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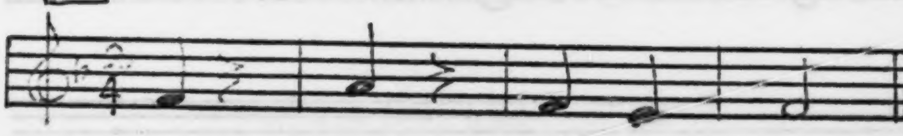

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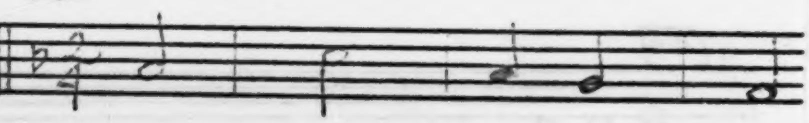

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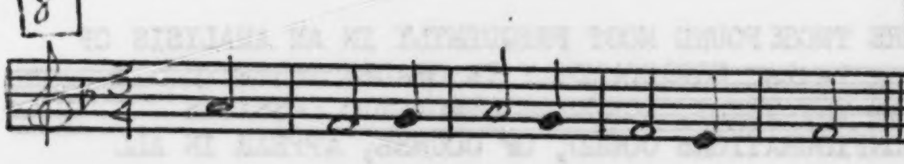

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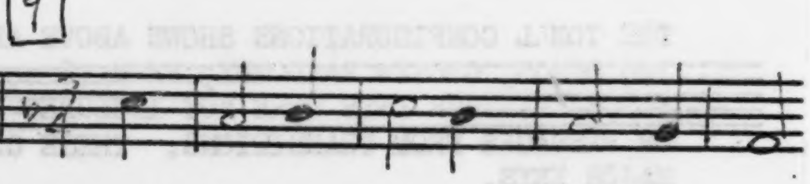

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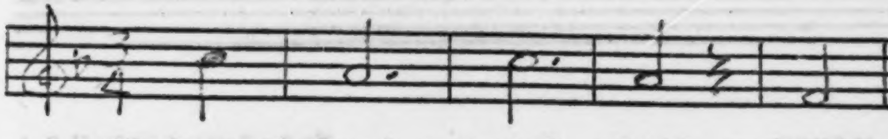

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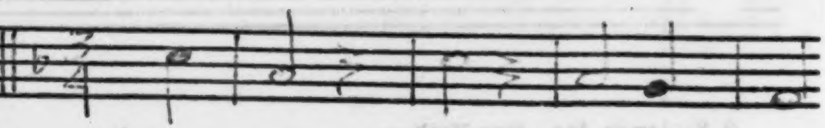

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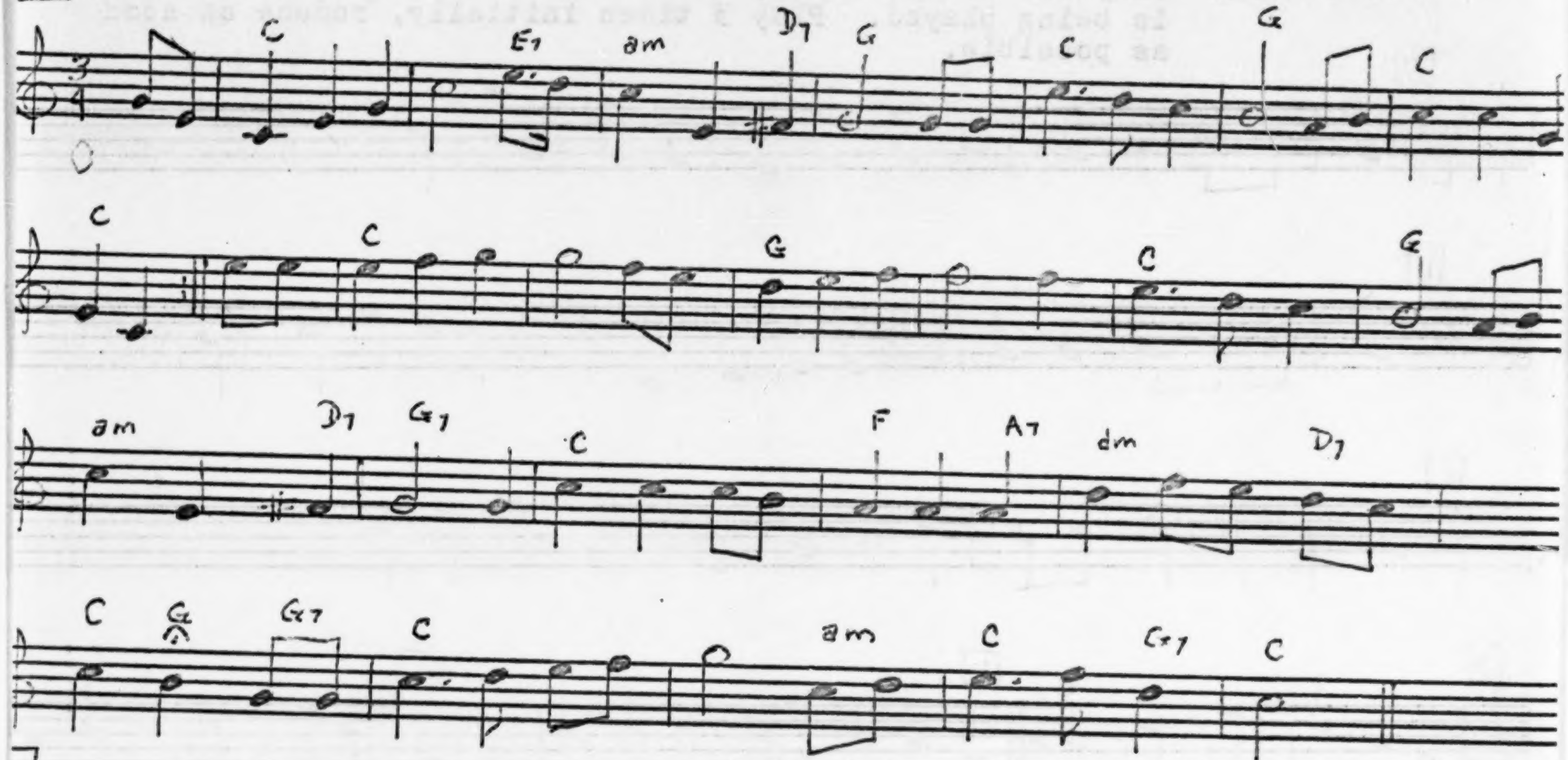
*Set contained a total of 20 exercises. The same exercises were also used written in the key of C.

Mystery Tunes*

1


C
E7
am
D7
G
C
G
C
C
C
G
C
G
am
D7
G7
C
F
A7
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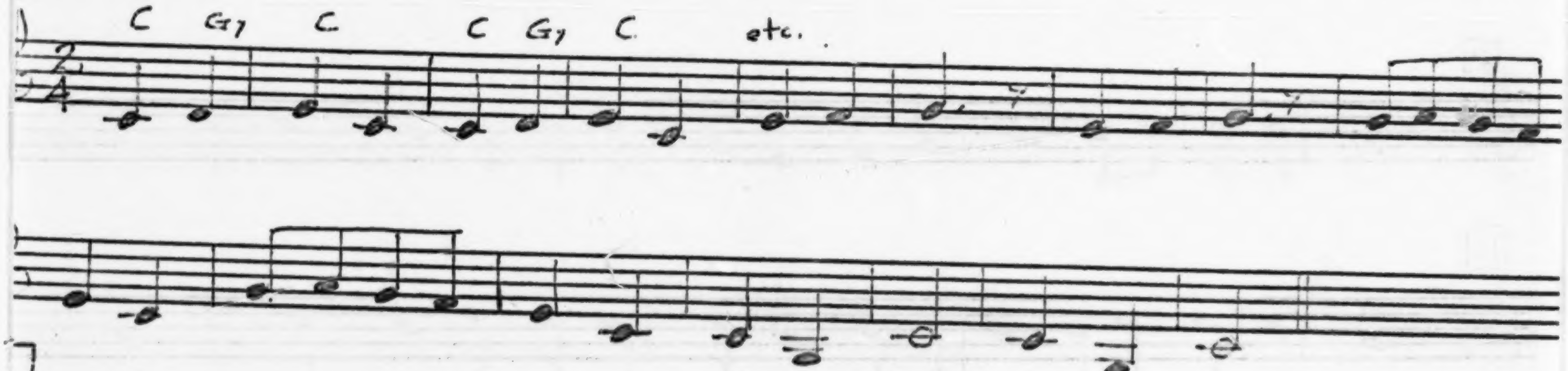
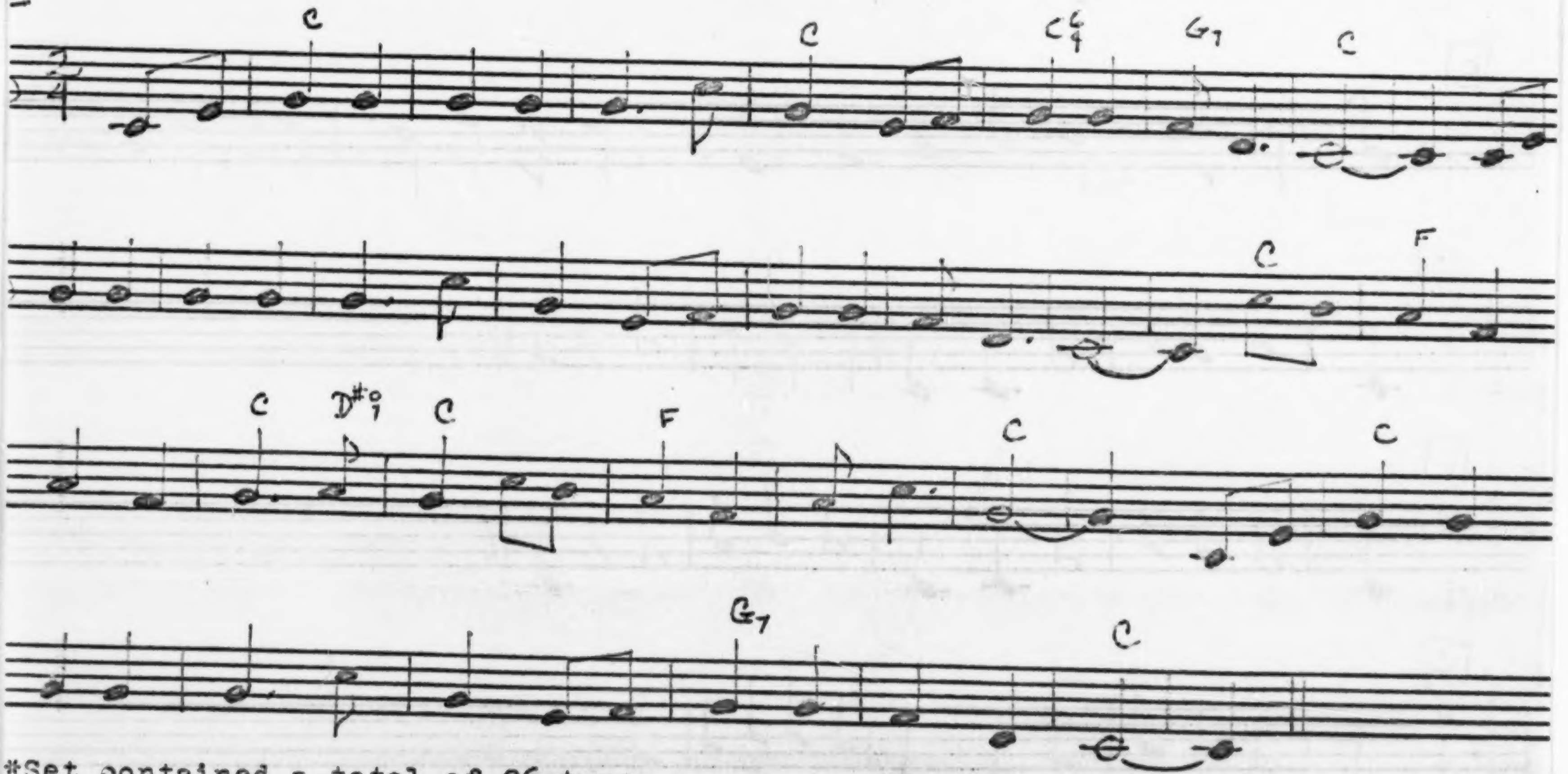
G7
C
am
C
G7
C


C
G7
C
C
G7
C
etc.


C
C
C6/4
G7
C
C
F
C
D#°7
C
F
C
C
G7
C

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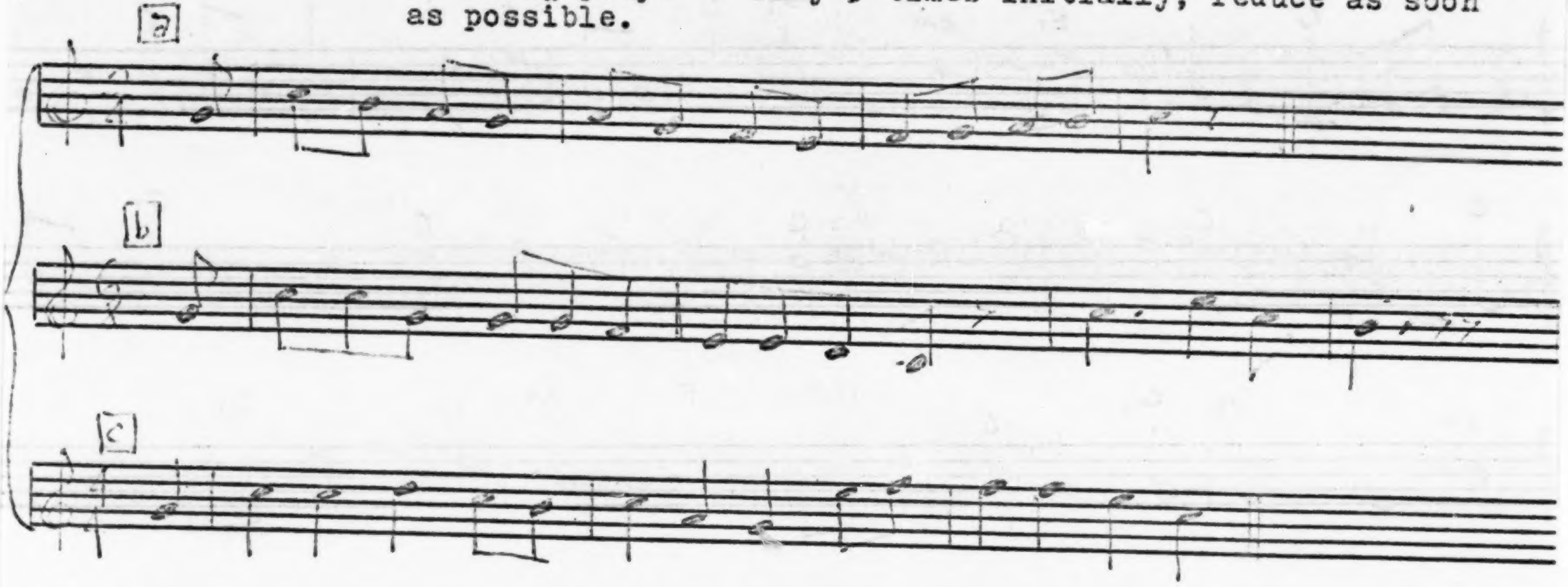
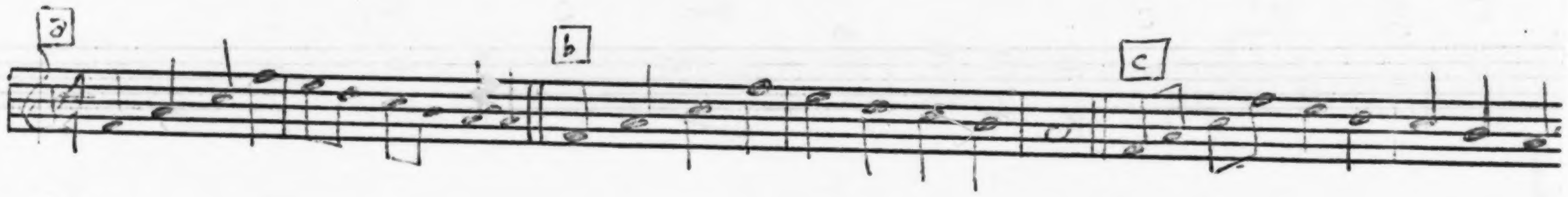
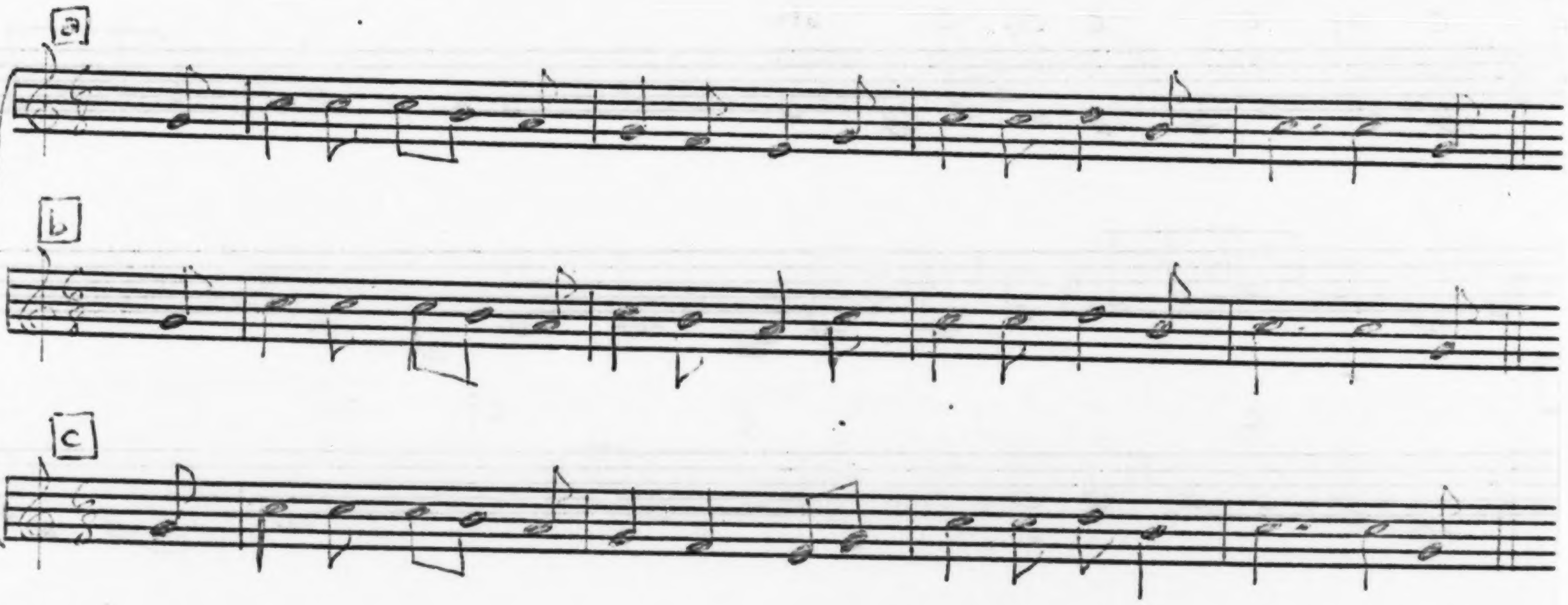
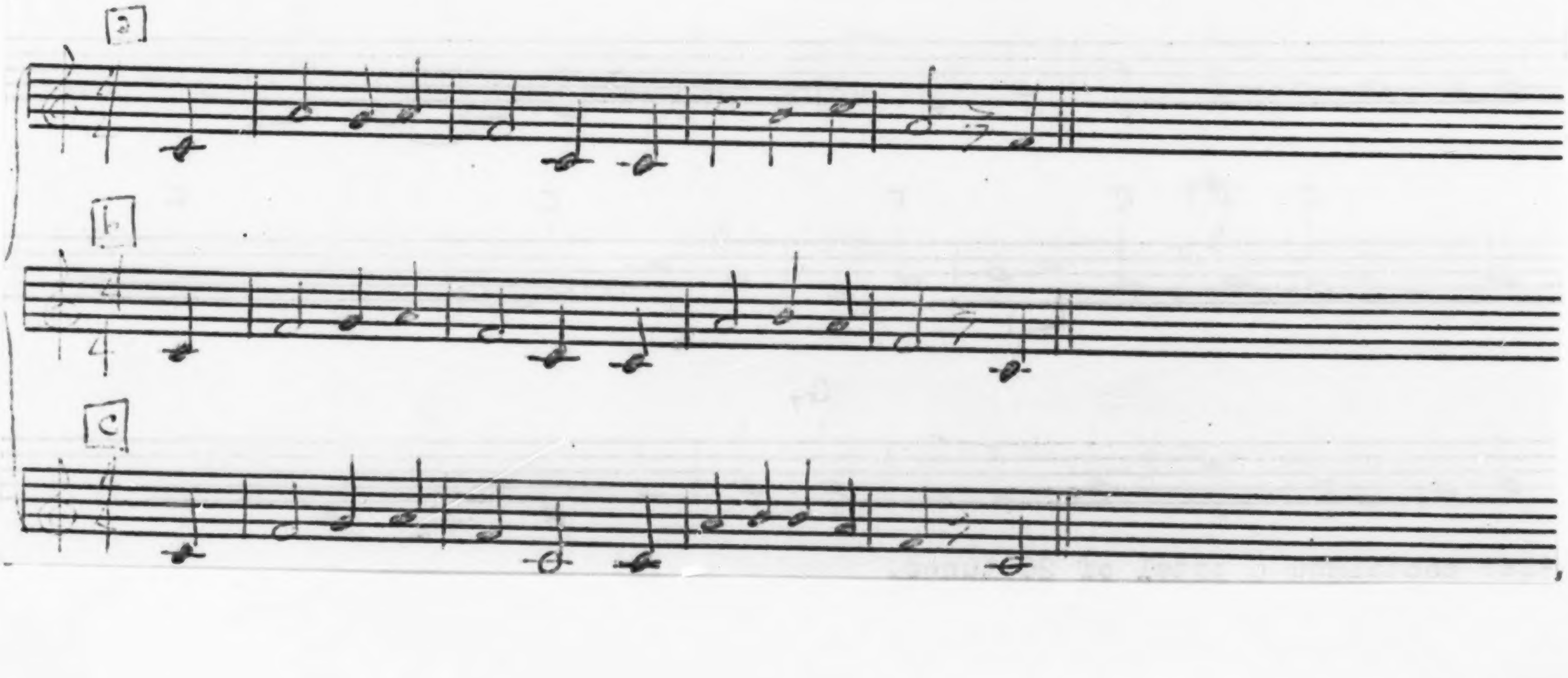
*Set contained a total of 26 tunes.

Aural Work: Play one of the three, see if students can identify which is being played. Play 3 times initially, reduce as soon as possible.









2. Be able to match notation for a song with one of three songs played. Be able to do this with phrases.

3. Be able to sing an arpeggiated chord on any given note.

4. Be able to sing IV and V when given I.

5. Be able to sing at sight exercises on the reading and dictation sheet--at least in C.

6. Know that changing key to F or G doesn't make it any harder to sing (it being melodic and rhythmic configurations (patterns).

Definite and Measurable Objectives on Aural Lesson # 6 (2nd nine weeks)

1. Increased tonal memory.

2. Increased awareness through the ear of where a cadence occurs.

3. Better listening to notes and their relation to one another in order to be able to call them back.

4. Increased awareness of the role of do in the cadences and where it is at all times.

5. Increased ability to listen for recurring sections in a piece of music.

6. These are in some ways difficult to measure but I think we can get at these pretty well. Hearing along with singing is important to us in this lesson.

Definite and Measurable Objectives on Listening Lesson # 1
Time in Music

1. An understanding of questions 1,3,8,9,10,11,12 and 15 on Students Listening Guide.

2. Ability to distinguish fast from slow music--this means given some reference point as somewhat in the middle. Should think students could count in a moderate tempo without assistance from the teacher.

3. Ability to listen for accents in music and hence be able to distinguish 2/4 from 3/4 time.

4. Be able to hear (isolate) a rhythmic pattern in a piece of music and either tap or sing it back or recognize it as same or different from another rhythm pattern. May obtain rhythm patterns from the music or given by the teacher.

5. A beginning of understanding of how pulse allows a number to fit into patterns or form to tie music together.

6. A beginning of understanding of the idea of contrast contributing to form--contrast in this case being fast and slow.

7. A beginning of understanding of how rhythmic patterns repeated either in whole or in part can make a piece fit together into a whole piece with some balance or form.

Definite and Measurable Objectives on Listening #2

1. Be able to listen to a theme or melody and draw its shape by contour lines.
   Identify the melody or theme by short or long, skip or step, what register, whether ornamented, whether calm or excited in expressive quality and rhythmic flow.

2. Be able to hear this theme or melody in an orchestral context.
3. Define motif.
4. Hear a motif in a theme (use examples on tape as an exercise).
5. Know that melody moves toward a goal. We don't want to overemphasize motifs and themes and their use by a composer so the listener never hears the important musical idea of melody.
6. Know that tension created by
   rising melody
   big skips
   stops and starts in the rhythm
   crescendos
   use of tonality moving toward do or 1.

Definite and Measurable Objectives on Listening #3

1. Be able to follow a line score and not get lost--at least not too often.

2. To associate the idea that notes higher on the staff are higher in pitch and vice versa.
3. To look at a meter sign and be able to count the meter with proper accent.
4. Know what a measure is.
5. Know meter signature for waltz time, for march time.
6. Knowledge of what notes are faster, quarters or sixteenths and what they look like.
7. Knowledge of musical symbols and what they mean like repeat sign, slur and staccato, expression marks etc.

8. Note, at least visually, the key change at variation 2 and return to original at variation 3. Consequently know where to look for the key even if they don't know what key is what.

9. Have some response to what dotted rhythms are like.

10. Know meaning of word Coda.

11. Know meaning of word countermelody.

12. Have some idea of what strings, woodwinds and brass sound like. Knowledge of instruments continually integrated into the training.

Definite and Measurable Objectives for Listening #4

Not sure that we really have any. We now feel that students need to have some items pointed out and find others in the music. This is a high level skill we are talking about and we hope this type of lesson makes some initial steps. I certainly hope it is better than the boy-girl business that we had the first nine weeks.

1. Objectives would be that students could listen for (in any music).
   a. contrast
   b. harmony
   c. types of instruments used
   d. melody and number of themes
   e. meter
   f. key
   g. instead of listing all items, I hope the 45 questions on the sheet might give a better idea of the things we feel students might be able to listen to in music.

2. Item 45 on phrases may be too difficult. There seems to be a great deal of confusion among musicians as to where phrases occur. Some are clear-cut, others doubtful. Think we should only talk about the clear-cut phrases.

Definite and Measurable Objectives for Listening #5

1. Recognize 2/4, 3/4 meter, non-metrical or multi-metrical music.

2. Know (define correctly) accelerando and ritard.

3. Know counterpoint, harmonic writing and difference between the two.

4. Know musical texture (that is thickness or thinness of instrumentation of chords, harmonies and of themes.

5. Recognize cadences when heard.

6. Be able to name these stylistic characteristics of Classical music.
   a. regular beat, no change of tempo
   b. simple rhythms, mostly accented on the beat
   c. melodies that are tuneful, balanced in character, with pauses and cadence points where one expects them--few surprises.
   d. simple harmony using mostly the I IV V chords
   e. fairly small orchestra, mostly strings with some woodwinds
   f. instruments playing in their middle range--neither very high nor very low

(May want to use questions on page 8 as good review for style characteristics.)

Definite and Measurable Objectives for Listening #6

1. We should try very hard to convince students that they should listen for form in all kinds of music. I think it is very doubtful whether the average student will be able to hear much form.

2. They should know, however, that when one talks about form, one is talking about the musical organization of a piece of music.

3. They should know that form is common to all art objects, painting, architecture, literature.

4. They should be able to list some of the component parts of form such as shape, balance, texture, etc. They should begin to understand some of these.

5. Should know that contrast is part of balance.

6. Should know that cadences mark the end of small organized sections and that one must listen for cadences to hear how these smaller sections have form and how they contribute to larger form.

7. Know that balance is obtained by similarity or contrast.

8. Know that balance doesn't mean equal in length. A pound of feathers and a pound of lead are equal in weight and balance but are not equal in size.

9. Should know how a composer can vary a melody, by alteration, embillishment, variations of tempo, rhythm, pitch, key, etc.

10. Unfortunately, this sounds pretty factual and intellectual. I doubt if anyone hears form unless he is looking for it and so everyone must know what to look for first. If they have some structure to their listening then they will begin to hear things, including form, that they weren't specifically looking for.

    Hopefully the objective of this lesson is to get each student to hear a little bit more in music than he could hear before this lesson was taught.

Listening Lesson No. 2
Teacher's Guide

Melody--Lesson one

The purpose of this lesson is to introduce concepts related to melody. We all know that it is easier to think about ideas for which we have a name. In this sense, listening to music may be something like walking on a busy city street. We usually pay little attention to the characteristics of the people we pass. But if we were forced to identify a seldom-seen relative, arriving at the train station, we would have in mind some very definite features as we searched the crowd.

If this theory does not seem too far-fetched, then you see the idea behind this lesson. It seems that almost everyone can recognize certain tunes "by ear" but, if asked to explain how the tune was identified most people would be at a loss.

If we describe a man as "about 5'9", medium build, blue eyes, black hair, about 55 years of age, we have not been so definite as to make it possible for someone to have a clear picture of the man. But we have called attention to some key features which supply a framework for our later filling in. In the same way, we do not completely identify a melody by listing its key features, but we do a better job of directing our thoughts and focusing our attention.

The concepts used in this lesson are (1) shape, (2) progression: conjunct, disjunct, diatonic, chromatic, (3) dimensions: length and range, (4) rhythmic flow, (5) ornamentation, and (6) uses of melody: repetition, development, sequence, and contrast.

Obviously, this list of concepts is not exhaustive. Nor does it apply to all kinds of music in all eras. However, for the purposes of this project, these concepts seem to be the ones most needed to develop an understanding of melody in relation to expectation.

The piano music has been left off the tape. You play these for the students as time allows, but we want to reduce this lesson to half its former length.

For instance, to check student's understanding of the term shape, you might diagram the shape of various melodies on the board and then play these melodies in random order, asking students to select the ones which have rising or falling shapes. Or have students draw the general shape of a melody that they know. Or ask them to listen to some of the melodies heard frequently on television and report back to the class on the shape of these tunes.

You might also test their ability to detect shape by asking them to recognize which of the melodies that you play on a given page; for instance, play one of the melodies on page two and have students write down the correct number.

We hope you will be able to lead the class to ask questions about the things they do not understand. It is natural to assume that teacher explanations are helpful in presenting new ideas, but when the ideas are as elusive as most of the abstractions we are forced to use in discussing music, it is difficult to know whether children really understand something unless we give them an opportunity to recast a thought in their own language.

I am particularly concerned about giving the student the wrong idea for what constitutes a melody. The Student's Listening Guide gives "etc." after most of the examples; this means that all that is shown is a tune or a theme, and not the complete melody. Far too often we become concerned about a theme and the treatment given it by the composer and fail to see the more important total picture, the picture of the entire melody with its high and low spots, its tension and release.

Possible narration

"What is a melody?" Is it anything like a tune or a theme or a motif? Let's find out what the poets have had to say. One Tin Pan Alley songwriter decided that "A Pretty Girl is Like a Melody." But, that song tells us more about pretty girls than it does about melodies.

Robert Burns, the Scottish poet (1759-1796) who lived about the same time as Mozart (1756-1791) had this to say about the same melodies.

> "Oh my love is like a red, red rose,
> That's nearly sprung in June;
> Oh my luve is like the melodies,
> That's sweetly played in tune."

John Keats (1795-1821) looked at musicians on a Greek vase and decided that:

> "Heard melodies are sweet, but those
> Unheard
> Are sweeter."

It may be that Keat's girl did not play in tune as well as Burn's lady.

Maybe we should consider the dictionary definition of melody: "A sweet or agreeable succession of sounds." This helps some, but not a whole lot. People could have very different ideas about what makes "sweet sounds." A miser might think the clinking of coins is the best melody possible. A hungry man would be apt to prefer the sound of a steak sizzling over a fire. A school boy might think the most agreeable sound possible is the class bell at the end of each school day.

From following along this far, you can tell that music is hard to describe with words. We could talk about melody all day long to someone who had never heard one. By the time we finished talking, he still would not know the answer to the question "What is a melody?"

Listen to these examples and write down the names of the tunes, if you can. (You have heard all of these tunes on television.) (Examples 1-5)

The first one was "Winston tastes good like a cigareete should." (Of course, we realize that cigarettes are not really good tasting.) The second was "Please, please, do not be a litterbug." Third was "See the USA in your Chevrolet." Number four is the "Funeral March of a Marionette," the theme of the Alfred Hitchcock hour. And last, you heard an excerpt from the "William Tell Overture," the theme of the Lone Ranger.

What was it about these melodies or themes that makes it possible for you to tell them apart? One thing is their "shape."

Shape

Shape in music is a borrowed word. Music takes place "in time" instead of being like a painting, all there at once. When we say "shape" in music we mean the pattern the tones make in our memory as we compare what is happening now with what happened before. If we write the notes on paper we can see the shape our ears help us to hear.

Look at examples six, seven, eight, and nine. These are parts of melodies that begin on one, repeated tone. Let's listen and discover what this kind of shape in melodies sounds like. (Examples 6-9).

One thing you should notice is that repeated tones lead you to expect a change. That is, you know the melody must eventually go up or down--it cannot just plunk away like "Johnny One-Note" forever. When you hear a series of tones that are almost the same the melody seems to have a neutral shape. You might compare such a melody to a straight line.

Now listen to these melodies (examples 10-16) and decide if they are raising (going up) melodies, or falling melodies (starting on a higher tone and moving to a lower one).

Which ones went down?(10,11,12,13)
Which ones went up? (14,15,16)

You may want to say "some of them did both--they went up for a while and then came down." And that is true. A melody cannot continue in one direction for too long or it runs out of room. You may have seen Victor Borge, the musical comedian, on television. One of his jokes is to begin a frantic scale run, up and up the keyboard until he finally reaches so far that he falls off the piano stool.

Most melodies tend to turn around after high or low notes and go the other way. This shape gives the idea of circling around one point. Listen to examples 17, 18 and 19.

Now that we have found out about "shape" let's try to decide on some other ways to describe a melody. Listen to these examples (20, 21,22,23). Now compare these examples (24,25,26). What did the first group have in common? What did the second group have in common?

(first group: disjunct) moving mostly by skip
(second group: conjunct) moving mostly be step

Notice that the melodies that move by step can move by two kinds of steps: whole steps and half steps. The Beethoven and Wagner melodies (25,26) are repeated on the tape here so you can point out that the one moves mostly by whole steps, the other by half steps. The Beethoven melody moves mostly by whole steps, while the Wagner melody moves by half-steps, except for the skip at the beginning. Listen to this Mozart melody. How does it move? (play example 27)

So far we have found two ways to describe a melody: its shape and its way of moving. (contour and progression)

Another feature of melody is its "dimensions." Imagine a skyscraper--it is very tall but not so wide. A warehouse is just the other way: not very tall, but fairly long and wide. We can tell a building by its shape and by its dimensions. For example, a toy building and a skyscraper may have the same shape but different dimensions. (illustration)

A melody has two dimensions--length and range. Some melodies are very short (play examples 28, 29) while others are quite long (play examples 30,31). When we say a melody is long we mean it goes for quite a while before coming to a point of rest. Notice that example 31 must reach its end before taking a breath. (play example)

The other dimension is range--how great is the distance between this highest and lowest note? Listen to these two groups of melodies. (play examples 32, 33, 34, 35) Which pair has a wide range and which has a narrow range? The first pair had a wide range. The second pair had a fairly narrow range.

Register

Melodies can have the same shape, way of moving and dimensions, but a different "register." Some melodies are meant to sound in the high register (play example 36) and others to sound in the low register. (play example 37)

Ornamentation

Some melodies are decorated or given less important notes around the notes that make the framework of the melody. In example 38, Mozart has used a figuration to decorate a simple a minor triad. Couperin uses ornaments to embellish the melody in the next example. (example 39)

Rhythmic flow

Imagine a stream, flowing peacefully through the woods. Compare that to a geyser like Old Faithful in Yellowstone Park. The peaceful stream has a regular flow, but the geyser is uneven and irregular. The rhythmic movement of music has these extremes too. Some melodies seem to move along without pause, while others go in spurts and bursts. Listen to these examples and decide if they seem even or uneven in their rhythmic flow. (examples 40,41,42,43) The first pair flowed evenly. The second pair made sudden stops.

Uses of melody

Now that we know about shape, way of moving, dimensions, register, ornamentation, expressive quality and rhythmic flow, we are ready to see how composers use a melody. The television people usually take the kind of melody we call a "tune" and just repeat it if they want to make it last longer. (example 44) So do composers (example 45).

Many composers take a very small unit of melody, or a motif, and work with it. To understand the difference between a "tune" and a "motif" let's use another picture. A tune might be compared to a shape like a square or a triangle. (illustrations) It is complete as it stands. A motif is more like a few dots. We can arrange these dots in many ways. (illustrations)

In Beethoven's Fifth Symphony a very short motif is used as the seed that grows into an entire movement. (play example 46) We hear this motif again and again--sometimes repeated and sometimes changed slightly, but always present. Beethoven liked to do this a lot (example 47).

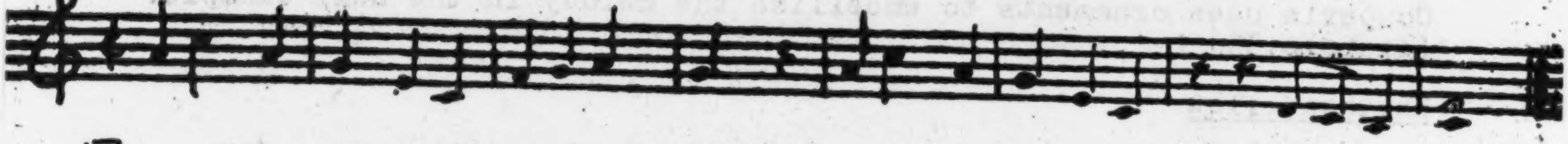
Another way to use melody is to write a sequence. A sequence is a repeated pattern that starts on a higher or lower pitch (examples 48,49)

Still another possiblity is "contrast." Contrast means to do the opposite. Listen to example 50. It begins with a bold flourish and ends with a singing, relaxed movement; notice the contrast in Mozart's Overture to Don Giovanni (play example 51).

The following 12 pages used with Listening Lesson No. 2.

MELODY IN MUSIC
STUDENT'S LISTENING GUIDE

1



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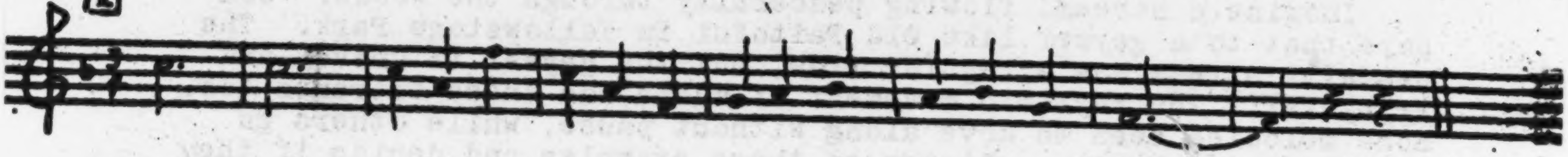

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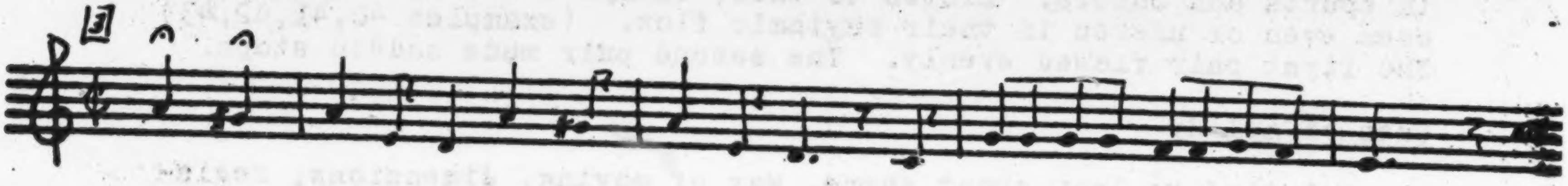

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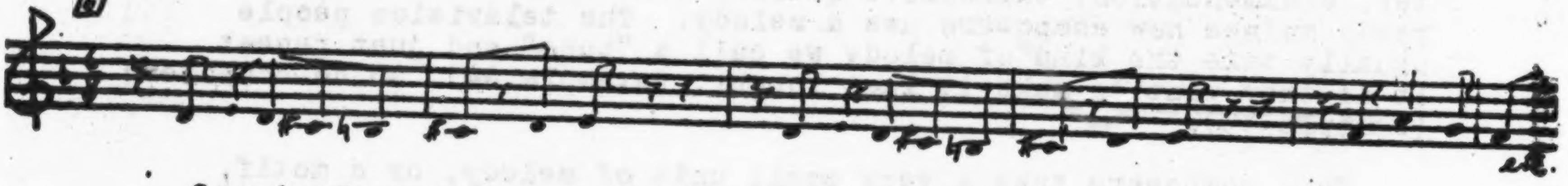

Gounod: Funeral March of a Marionette

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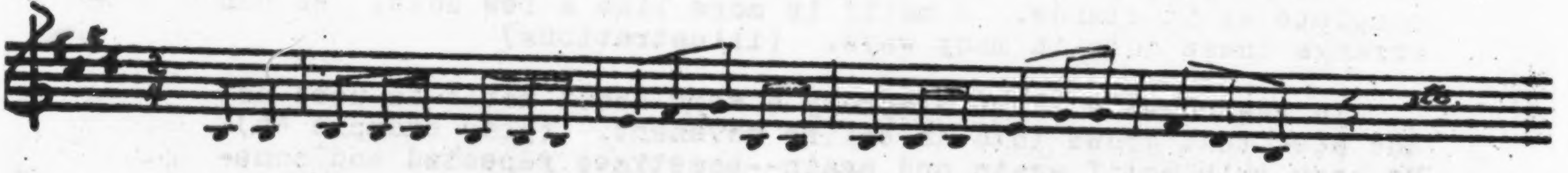
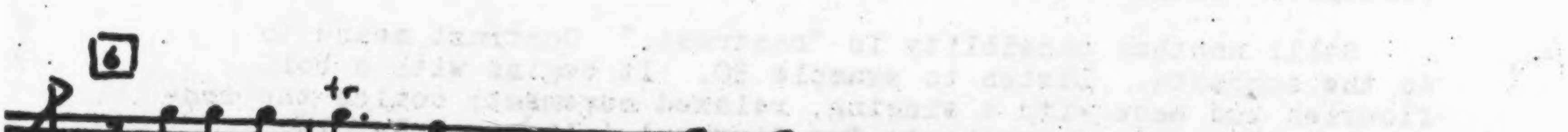


Rossini: William Tell Overture

Melodies have characteristics that make it possible to tell them apart. How many of the television melodies shown above can you recognize?

6



Mozart: Divertimento in C, K. 188, 1st movement

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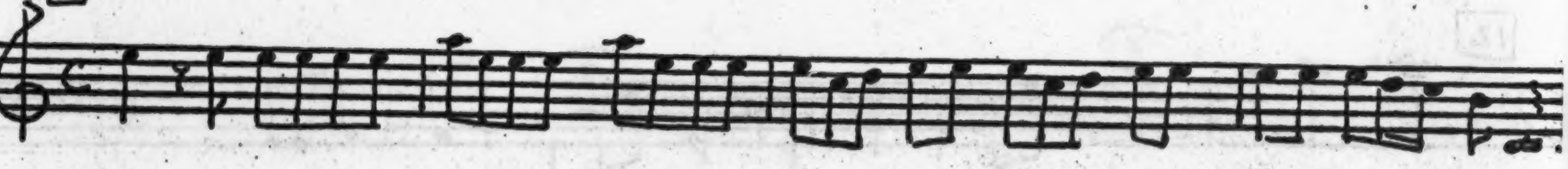
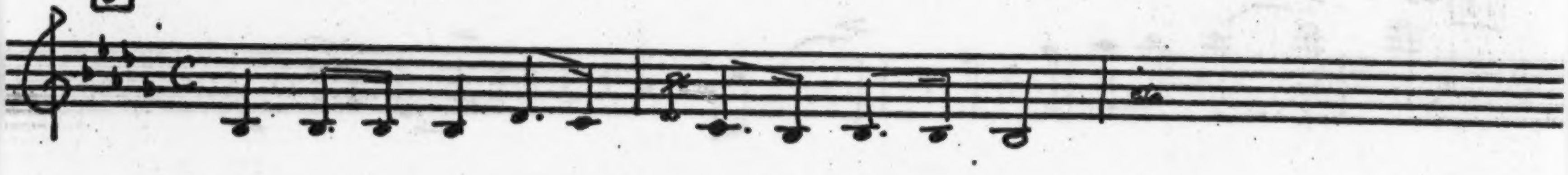


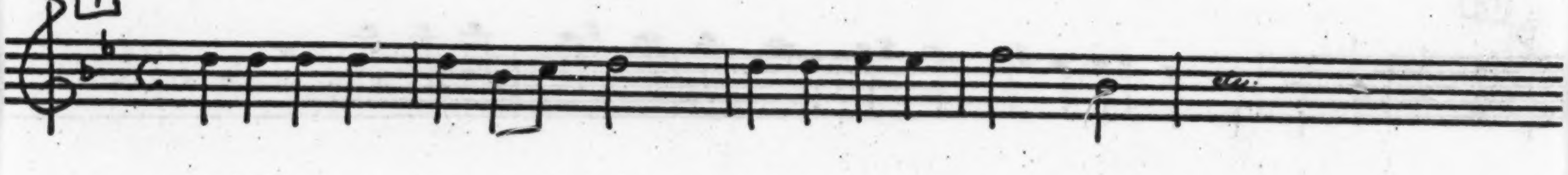
J. S. Bach: Concerto for 4 Harpsichords and Orchestra, A minor, 1st movement.

8



Chopin: Sonata in Bb Minor, Op. 35, 3rd movement

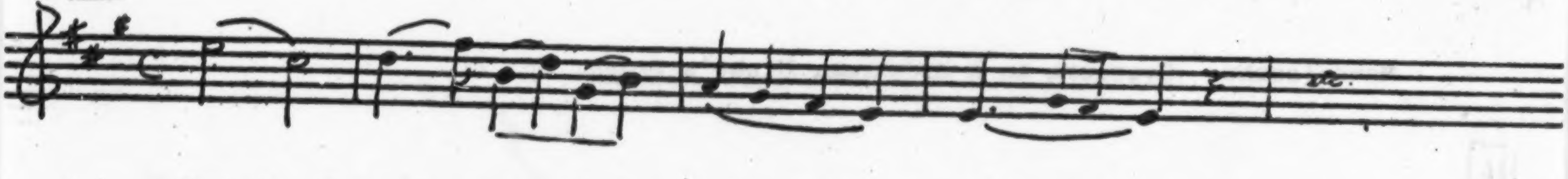
9



Tschalkowsky: Chanson Triste, op. 40, #2

A melody has a SHAPE that looks the way the melody sounds. The melodies above begin on a repeated tone and have a fairly level shape.

10



Mozart: Concerto in A major for Piano and Orchestra, K. 488, 1st movement

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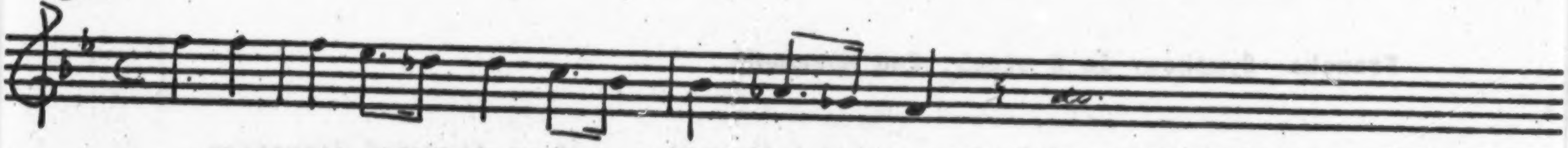
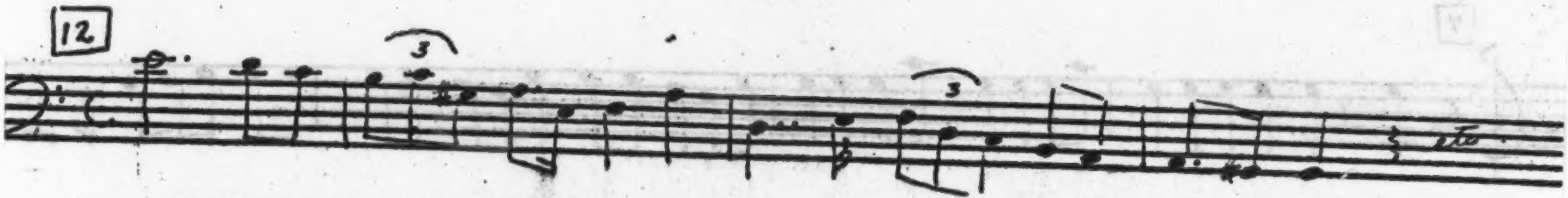


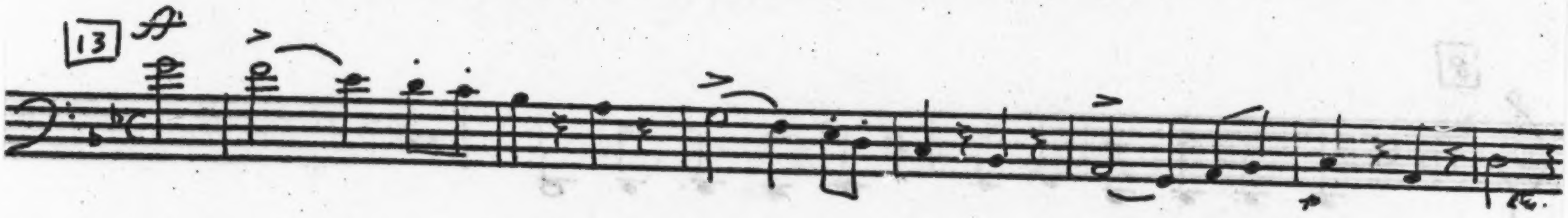
Mendelssohn: Trio #1 in D minor for Violin, Cello, Piano, Op. 49, 2nd movement

12



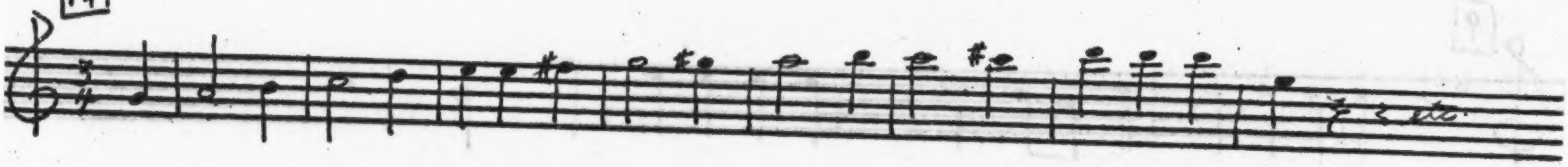
Berlioz: King Lear Overture, Op. 4

13



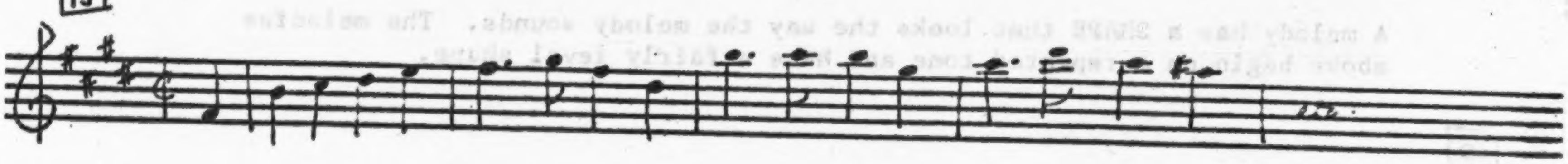
Berlioz: Symphonie Fantastique, Op. 14, 4th movement ("March to the Scaffold")

14



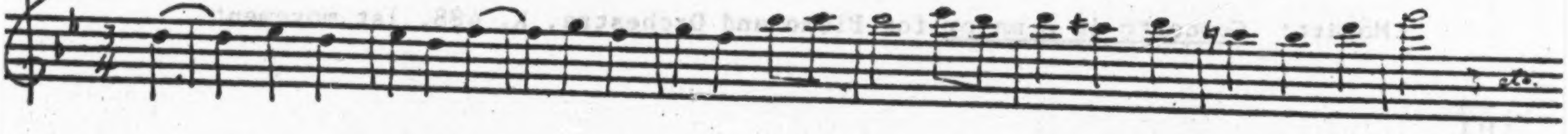
Beethoven: Symphony #1 in C, Op. 21

15



Mendelssohn: Overture to A Midsummer Night's Dream, Op. 21

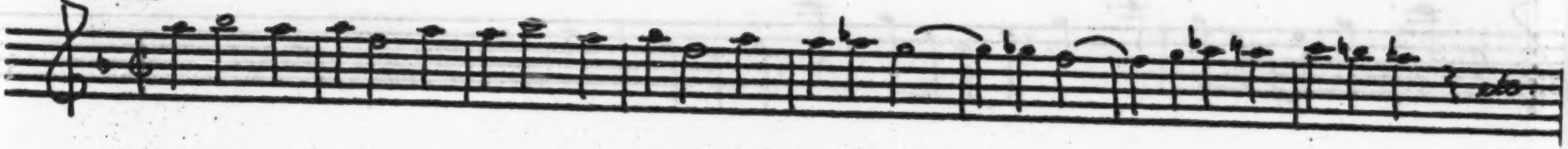
16



Franck: Symphony in D minor, 2nd movement

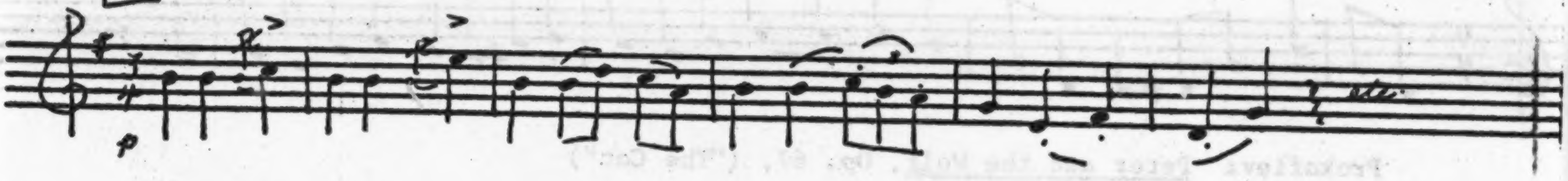
Some melodies move mainly in an upward direction or in a downward direction. Which of the melodies shown above (10-16) have an upward direction?__________ Which of them have a downward direction?__________

17



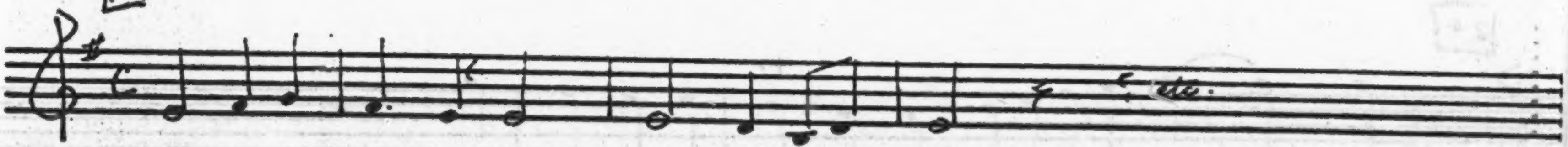
Franck: Symphony in D minor, 1st movement

18



Brahms: Symphony #2 in D, Op. 73, 3rd movement

19

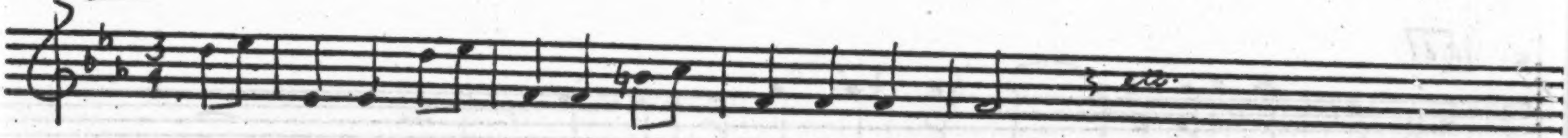


Dvorak: Symphony #5 in E minor ("New World"), 4th movement

Most melodies seem to turn around after high or low notes and go the other way. This shape gives the idea of circling around one or two points. (examples 17, 18, 19)

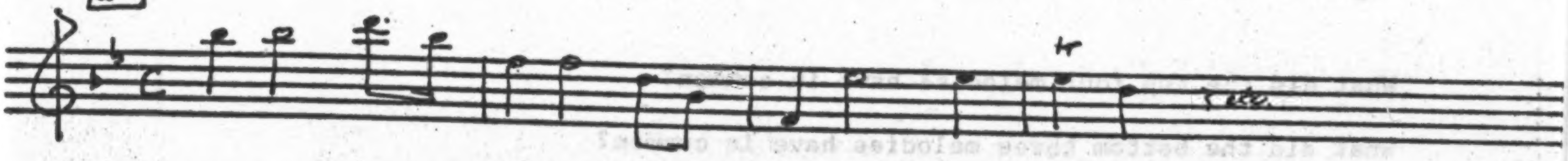
Now that we have found out about a melody's "shape", let's try to decide on some other ways to describe melodies. Listen to these examples:

20



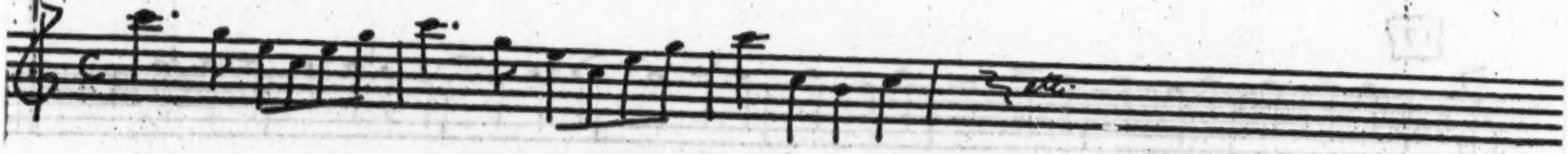
Haydn: Quartet in Eb for Strings, Op. 33, #2 ("The Joke"), 2nd movement

21



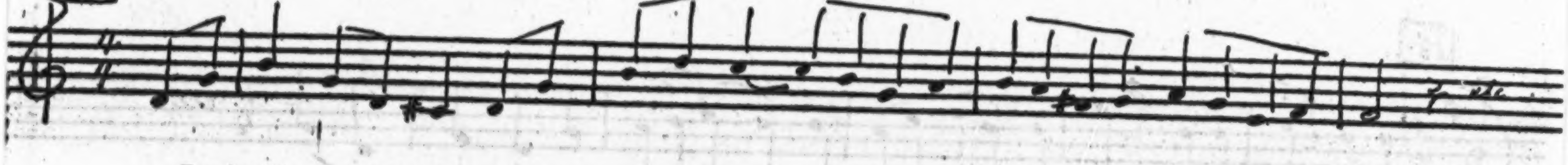
Mozart: Concerto in Bb for Bassoon and Orchestra, K. 191, 1st movement

22



Mozart: Concerto in C for Flute, Harp, Orchestra, K. 299

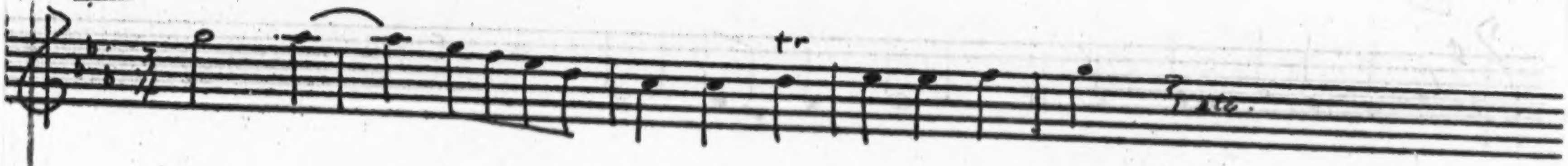
23



Prokofiev: Peter and the Wolf, Op. 67, ("The Cat")

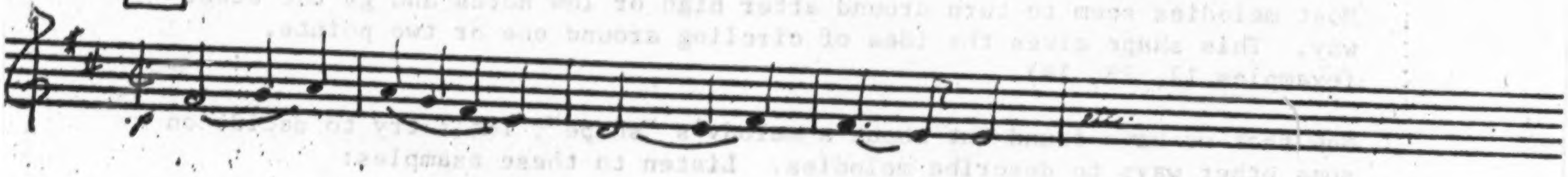
Now compare the three examples played next:

24



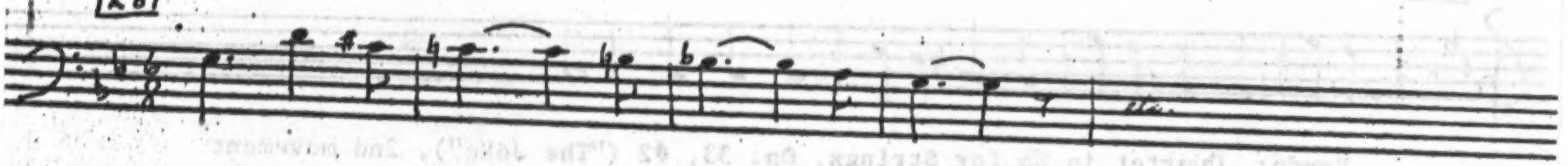
Mozart: Serenade in C minor for Woodwinds, K. 388, 3rd movement

25



Beethoven: Symphony #9 in D minor, Op. 125, 4th movement

26

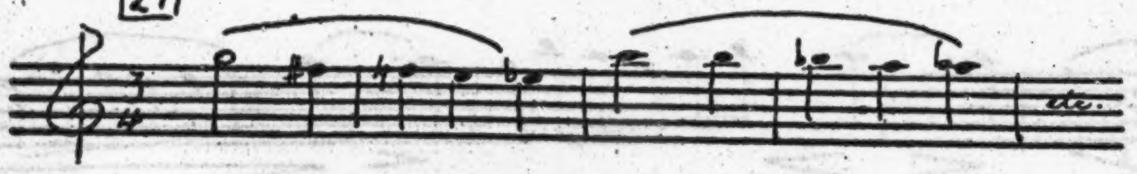


Wagner: "Song to the Evening Star" from Tannhauser

What did the top four melodies have in common?

What did the bottom three melodies have in common?

27



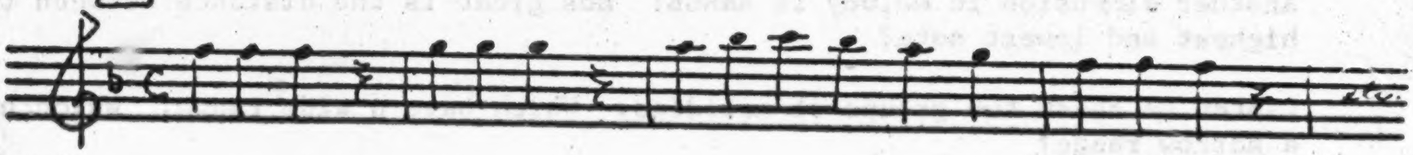
Mozart: Symphony #41 in C, K. 551, 3rd movement (measures 44-47)

Notice that the melody by Wagner and the Mozart melody shown above move mostly by half steps.

Another feature of melody is its "dimensions". Imagine a skyscraper--it is very tall, but not so wide. A warehouse is just the other way around--not very tall but quite long and wide. We can recognize a building by its shape and dimensions. For instance, a toy building and a skyscraper may have the same SHAPE but different dimensions.

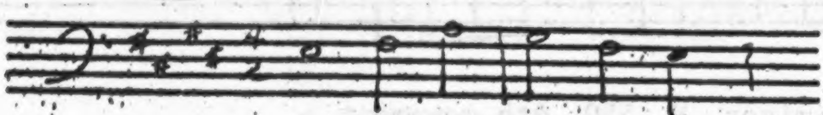
A melody has two DIMENSIONS: length and range. Some melodies are very short--

28



Mozart: A Musical Joke, K. 522, 1st movement

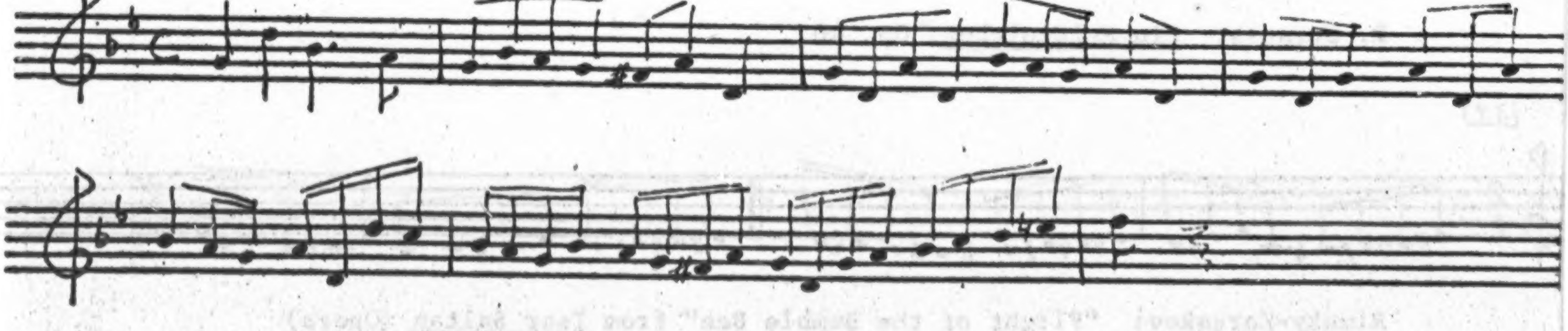
29



J. S. Bach: Fugue #9, The Well Tempered Clavier, Vol. II

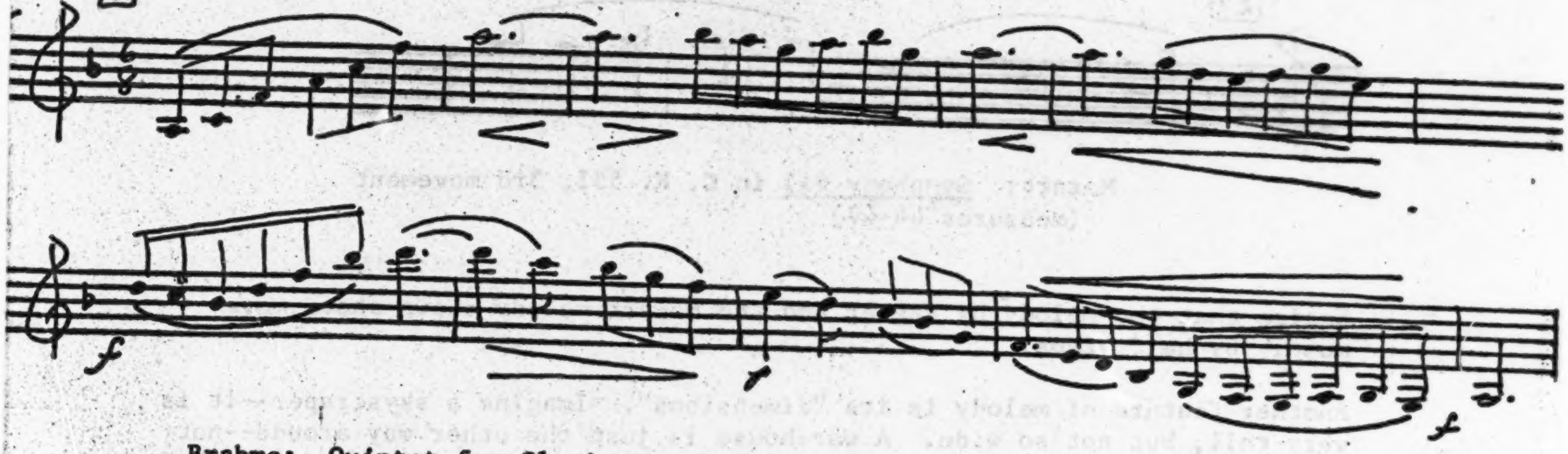
Other melodies are quite long--

30



J. S. Bach: Organ Fugue in G minor

31



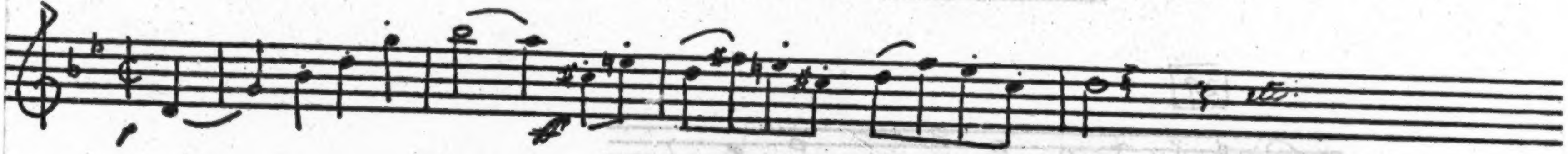
Brahms: Quintet for Clarinet and Strings, Op. 115

When we say a melody is long we mean it goes for quite a qhile before coming to a point of rest. Notice that example 31 must continue for ten measures before "taking a breath".

Another dimension in melody is RANGE: Hos great is the distance between the highest and lowest note?

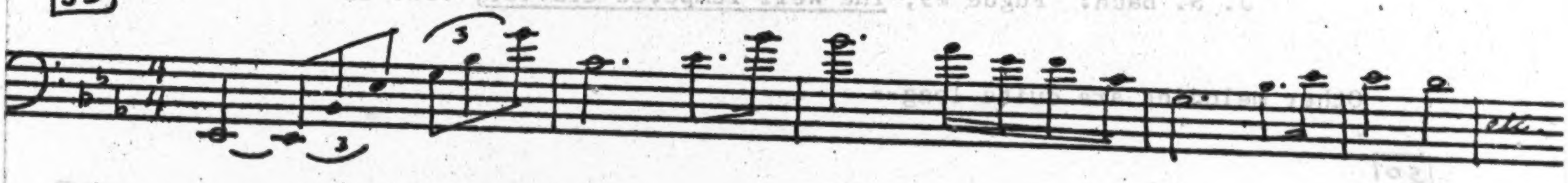
Listen to these two groups of melodies. Which have a wide range? Which have a narrow range?

32



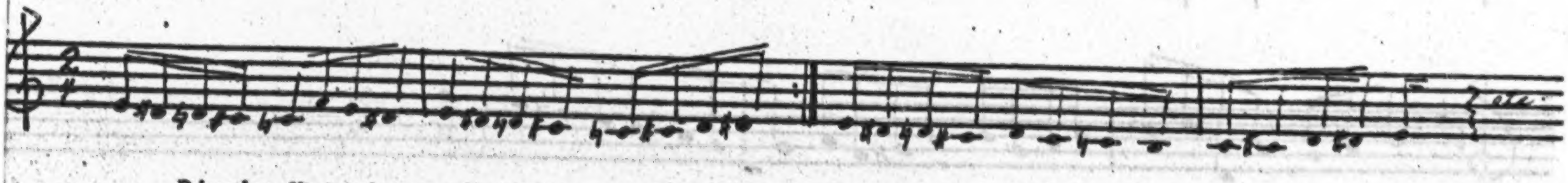
Mozart: Symphony #40 in G minor, K. 550, 4th movement

33



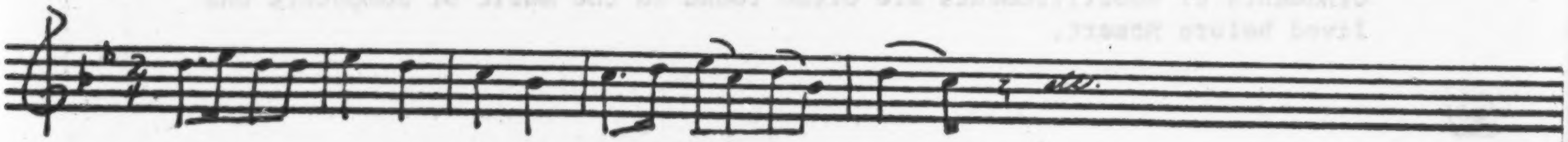
R. Strauss: Ein Heldenleben, Op. 40

34



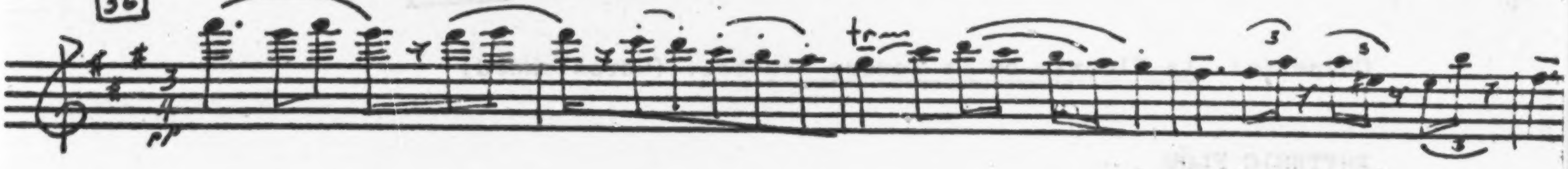
Rimsky-Korsakov: "Flight of the Bumble Bee" from Tsar Saltan (Opera)

35



Brahms: Variations on a Theme by Haydn, Op. 56a

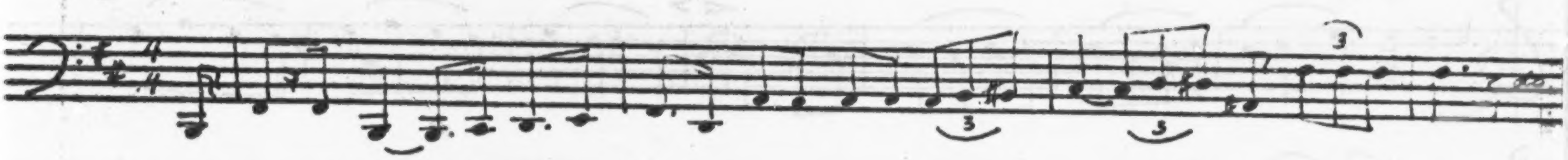
36



Prokofiev: Classical Symphony, Op. 25, 2nd movement

The melody above is played in a fairly high register.

37



Prokofiev: Peter and the Wolf, Op. 67, "The Grandfather"

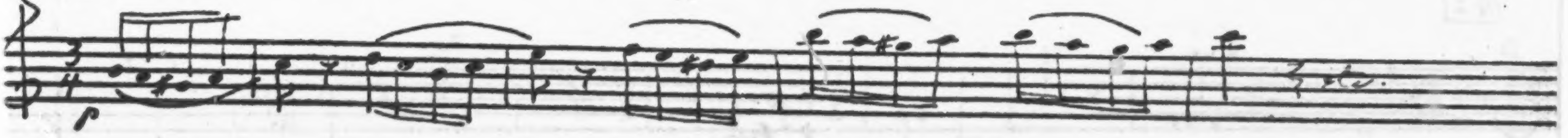
The melody above is played in a lower register.

ORNAMENTATION

Some melodies are decorated or given less important notes around the notes that make the framework of the melody.

In the example below Mozart has used a figuration to decorate a simple A minor triad.

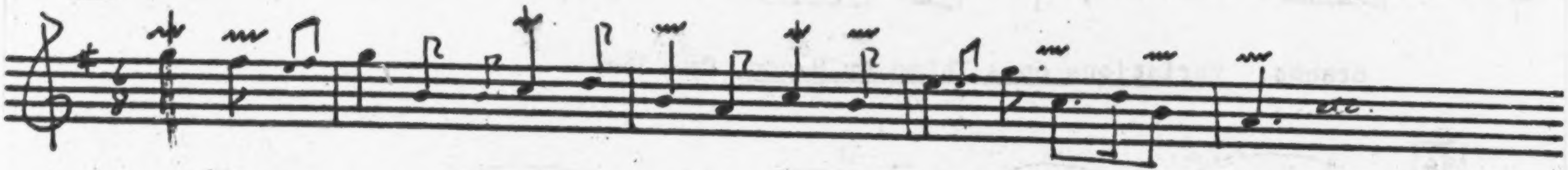
38



Mozart: Piano Sonata in A, K. 331, 3rd movement

Ornaments or embellishments are often found in the music of composers who lived before Mozart.

39

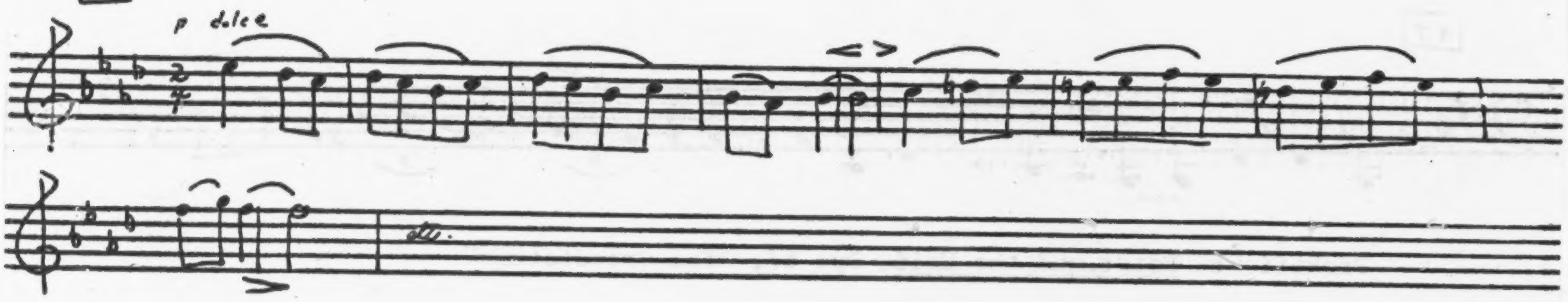


Couperin: La Fleurie ou La Tendre Nanètte, (Harpsichord)

RHYTHMIC FLOW

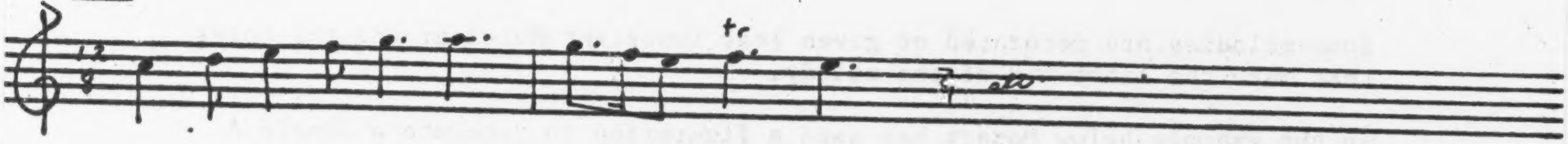
Some melodies move in an even, steady way. Others have a stop and go kind of motion. Listen to the melodies shown below and decide which ones seem to move in a regular, steady flow. Which ones seem to have a stop and go motion?

40



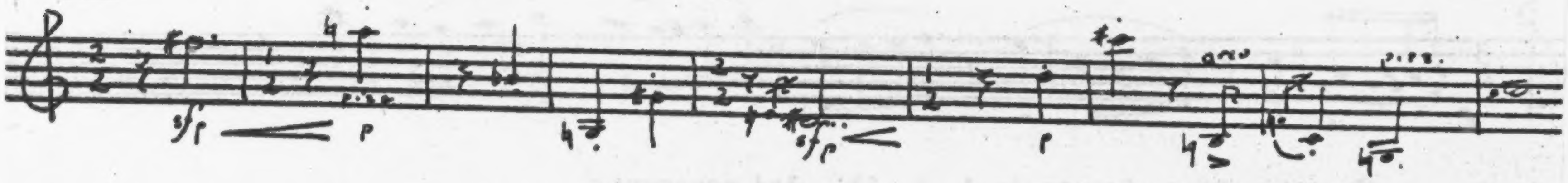
Brahms: Symphony #1 in C minor, Op. 68, 3rd movement

41



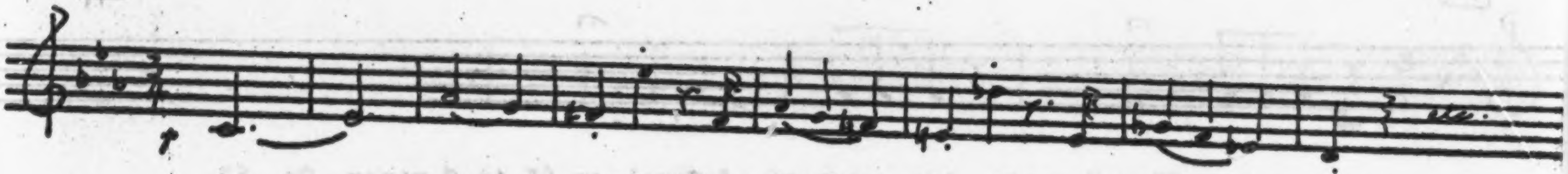
Handel: "Pastoral Symphony" from The Messiah

42



Webern: Quartet, Op. 22, 2nd movement

43

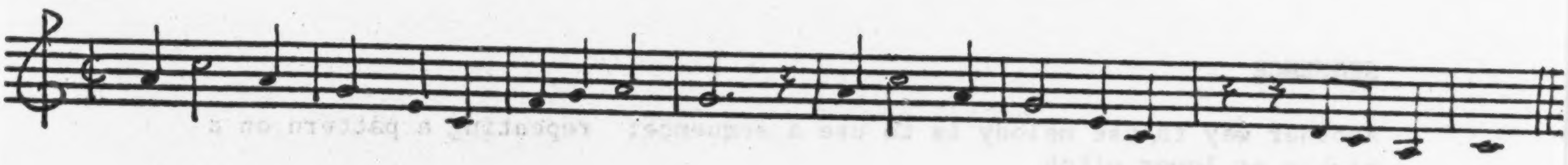


Mozart: Concerto for Piano, C minor, K. 491, 1st movement

USES OF MELODY

One way to use a melody is to simply repeat it over and over. Television melodies are often used in this way.

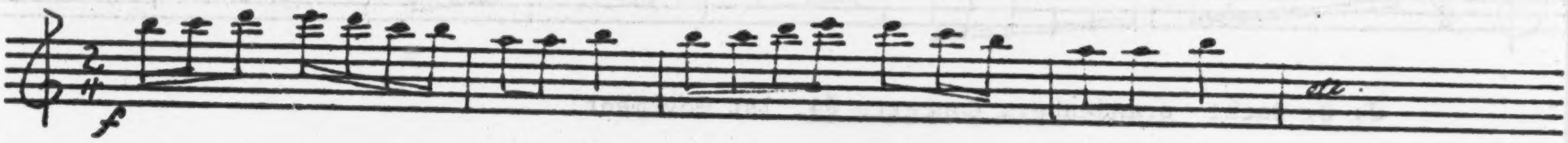
44



T.V. Melody ("Winston tastes good")

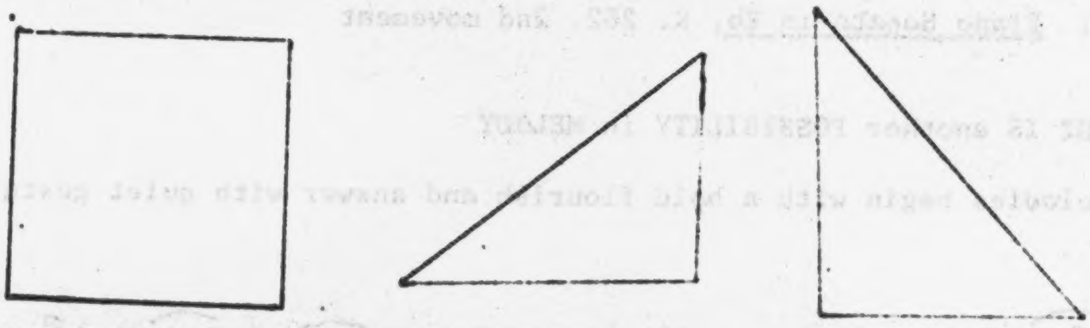
Composers like to repeat, too.

45

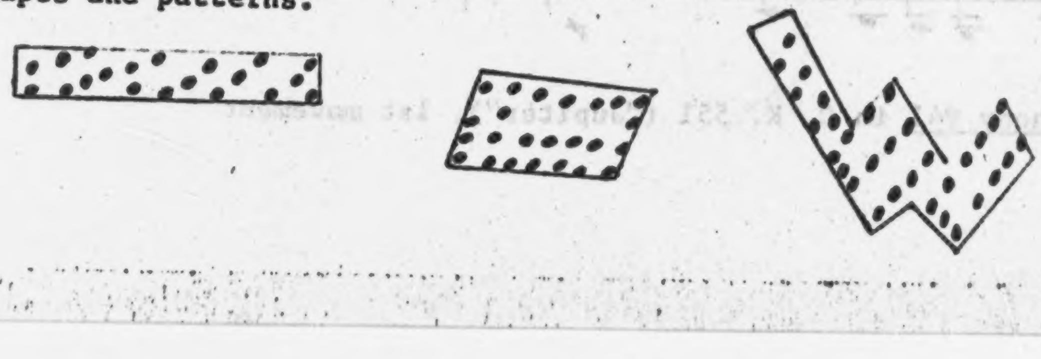


Stcavinsky: "Danse Russe" from Petrouchka Soite

Many composers take a very small unit of melody, or a motif, and work with it. To visualize the difference between a tune and a motif, you might think of a tune as being a complete pattern....like the square or triangle shown below.



But a "motif" is more like a few dots. It can be combined into many different shapes and patterns.



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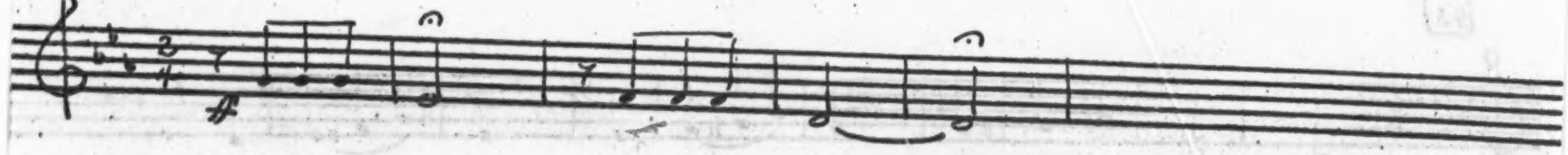
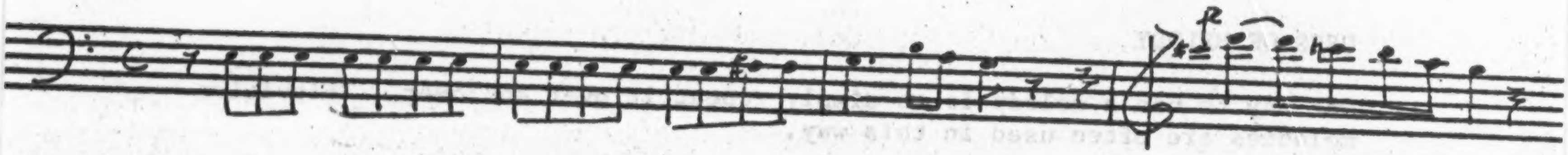


Beethoven: "Fate" motiv, 1st movement of Symphony #5 in C minor, Op. 67

47

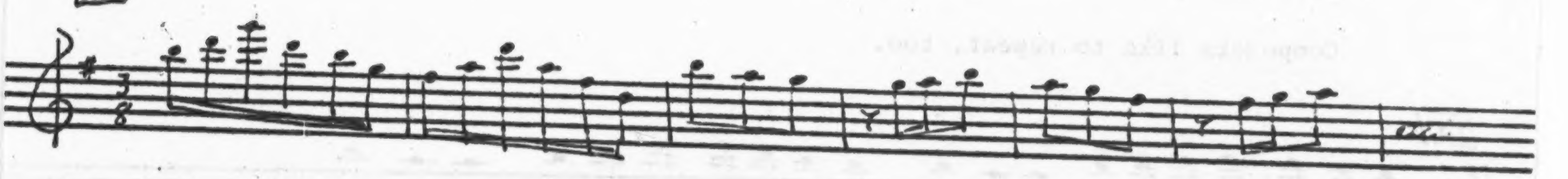


Beethoven: Piano Sonata #21 in C, Op. 53, ("Waldstein")--1st movement

SEQUENCE

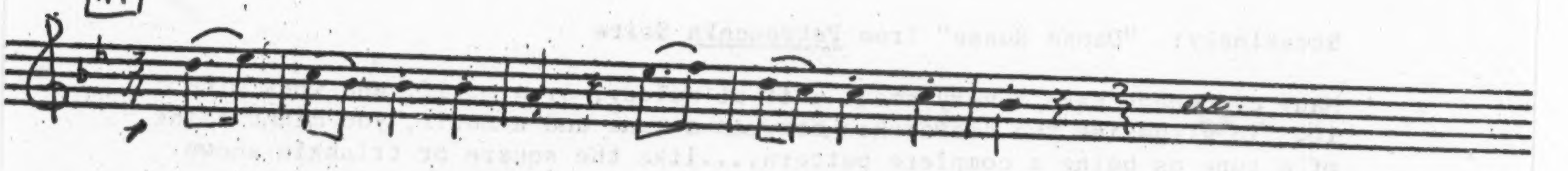
Another way to use melody is to use a sequence: repeating a pattern on a higher or lower pitch.

48



J. S. Bach: Brandenberg Concerto #4, 1st movement

49

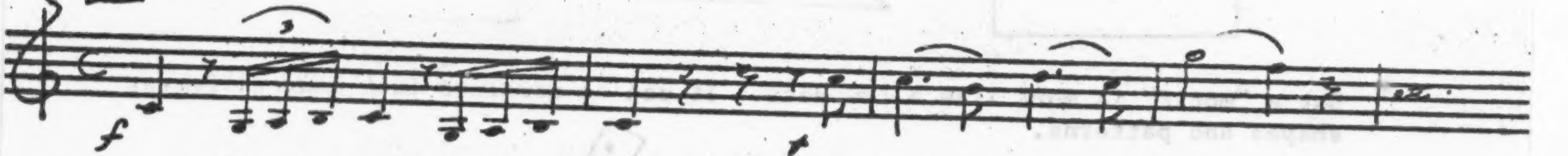


Mozart: Piano Sonata in Eb, K. 282, 2nd movement

CONTRAST IS another POSSIBILITY in MELODY

Some melodies begin with a bold flourish and answer with quiet gesture.

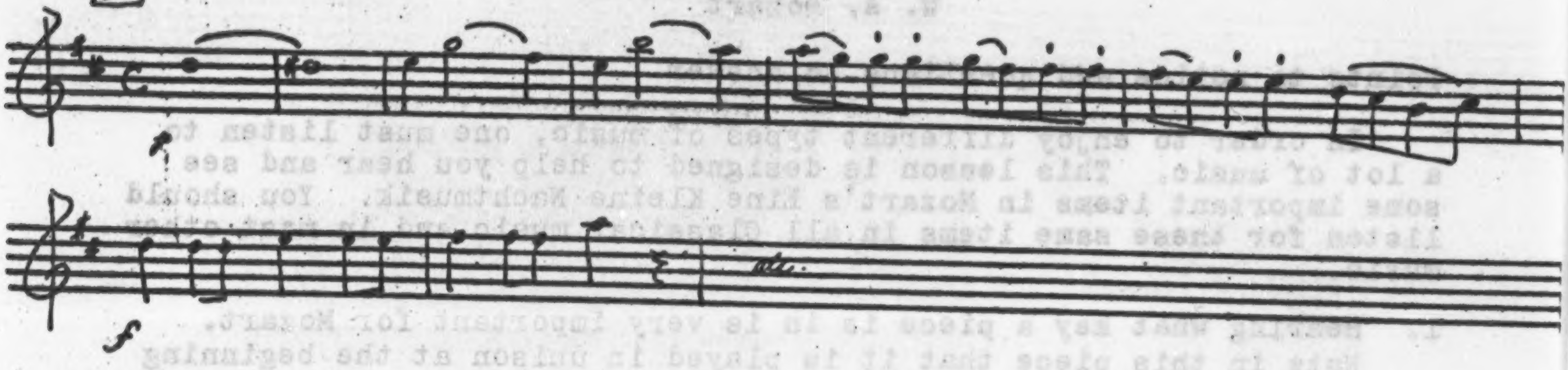
50



Mozart: Symphony #41 in C, K. 551 ("Jupiter"), 1st movement

Others begin stealthily and then explode.

61



Mozart: **Don Giovanni, K. 527, Overture**

Colwell No. 12 (Revised)

The following five pages used with Listening Lesson No. 4.

Eine Kleine Nachtmusik
W. A. Mozart

Points to notice and questions to answer

In order to enjoy different types of music, one must listen to a lot of music. This lesson is designed to help you hear and see some important items in Mozart's Eine Kleine Nachtmusik. You should listen for these same items in all Classical music and in most other music.

1. Hearing what key a piece is in is very important for Mozart. Note in this piece that it is played in unison at the beginning except for the first chord.

2. Notice that the melody uses chord tones.

3. Notice that we have two bars of chord tones on the I chord and then two bars of chord tones on the V chord.

4. Notice that the first two bars have a rising melody, the next two bars answer this with a falling melody.

5. From listening to the tempo of the number, what do you think allegro means?

6. Could you hear that all instruments were playing the same notes and that there isn't any harmony?

7. A string quartet is playing this number. How many and what instruments would this be?

8. Where does the harmony begin?

9. Mozart uses the idea of contrast when he has 4 bars in unison and then 4 bars of harmony.

10. The first cadence occurs in bars 9 and 10 and when Mozart wants to end this section he plays the V^7-I cadence twice to make sure you hear it.

11. The rest at the end of measure 10 also tells you that a section has ended.

12. Looking back we can see that we have had 2 four bar phrases--only the last phrase had 2 extra bars added on to emphasize the cadence and to raise your expectations when the phrase didn't end when you expected it to end.

13. This expectation is increased because the phrase ends on a high note.

14. In bar 11 we have contrast again with the piano marking. What does this mean?

15. Mozart uses trills and grace notes in this piece to make all the scales and chord progressions more interesting and not like an exercise.

16. Look at bar 12. Now look at bar 16. The quarter notes have changed to eighth notes. Are 8th notes faster or slower than quarter notes? These measures sound alike because the same pitches were in the first presentation with the grace notes.

17. Notice that the tempo is generally regular throughout the number.

18. Measures 15-18 are so nearly the same as measures 11-14 that we expect a stopping place in measure 18. We do have a cadence, a V-I and the I is emphasized with the sF marking. (What does this mean?) However this is not a real stopping spot as the steady 8th notes in the bass push on.

19. He gains contrast with a loud-soft passage twice in 18 and 19. He then uses a crescendo to point out a climax or high point. What is a crescendo?

20. In the section marked transition, we have new material that is different from anything so far in the piece. Mozart has apparently decided to try another theme in a different key and it usually takes a transition to get to another key easily.

21. We have evidence of the new key with the C# in bar 21.

22. Can you find a complete scale in the music which will emphasize the new key which is D?

23. For 6 bars Mozart emphasizes this new key, all the notes are either D (the new key) or C# (the sharp which has been added to the one in the key signature.) He uses only the I and V chords for harmony to emphasize this new key. He keeps us from getting bored with all of this repetition by putting in syncopation in bars 24-25 and spooks it up even more by having the melody in the cello and bass lines. What is syncopation?

24. By now you can notice that the steady 8th notes give continuity to the piece.

25. By measure 28 you feel comfortable in the new key and so he introduces a new theme, theme II.

26. Mozart uses the material from the 1st bar of the new theme 3 times to make sure you have caught on and can remember the new theme.

27. If you can't see or hear these things, raise your hand right now and ask your teacher what in the world is going on.

28. He tires of this theme quickly and introduces a third theme in bar 35. To emphasize that this is still in the new key (D) he has the cello play only one note in each measure on the first beat--I V I V. He repeats this theme twice to make sure you have heard it.

29. He is now ready to close the first section, called the exposition. There is some thematic material from theme II and some from theme I. Can you find it? The material from theme I is unison (so was part of theme I wasn't it?) Measure 53 is so like measure 10 that we expect this is the way he will end it. However he uses two new bars (which we will hear again later) to finish this first section.

30. Now as you look back over the first section or listen to it on the repeat, can you tell whether the first theme, second theme or 3rd theme has chord tones (either I or V chord) making up part of the melody?

31. When the piece was in G, how many strong beats were on the note G? When the piece was in D, how many strong beats were on the note D?

32. Ended in bar 55 in the key of D. When the repeat starts over at the beginning, we are immediately back in the key of G. This should sound unexpected. When it eventually goes on in bar 56 and plays the same tune as the beginning only in the key of D, it sounds more expected.

33. Bar 58 is not like bar 3--he doesn't drop down a note and so we expect a new key, probably E major or E minor.

34. We expect a strong chord in 60 as we had in bar 5--only we don't get it.

35. We do get a new key in bar 60--the key of C which we didn't expect and we also have the 3rd theme.

36. This section from 56-70 is called a development because the composer uses the same themes as before only in different keys. Composers can use other devices in development but we will talk about them later.

37. The music is loud at bar 76 to emphasize the return to the key of G.

38. After measure 76 how many bars are just like the beginning of the piece?

39. At bar 101 note that theme II is now in the same key as theme I, (G).

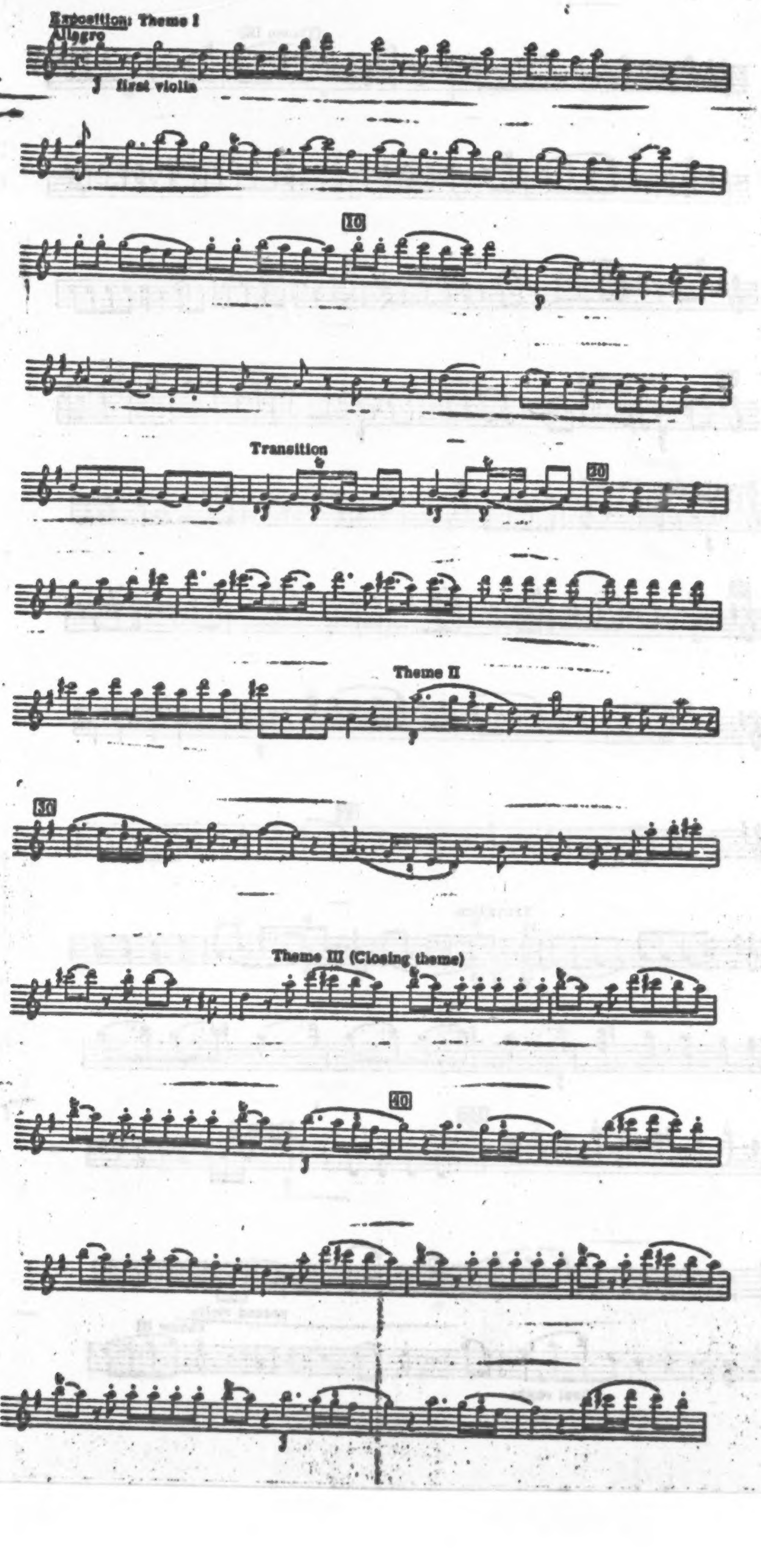
40. At bar 109 note that theme 3 is now in the same key as theme I, (G).

a partial sample of line scores furnished students for listening.

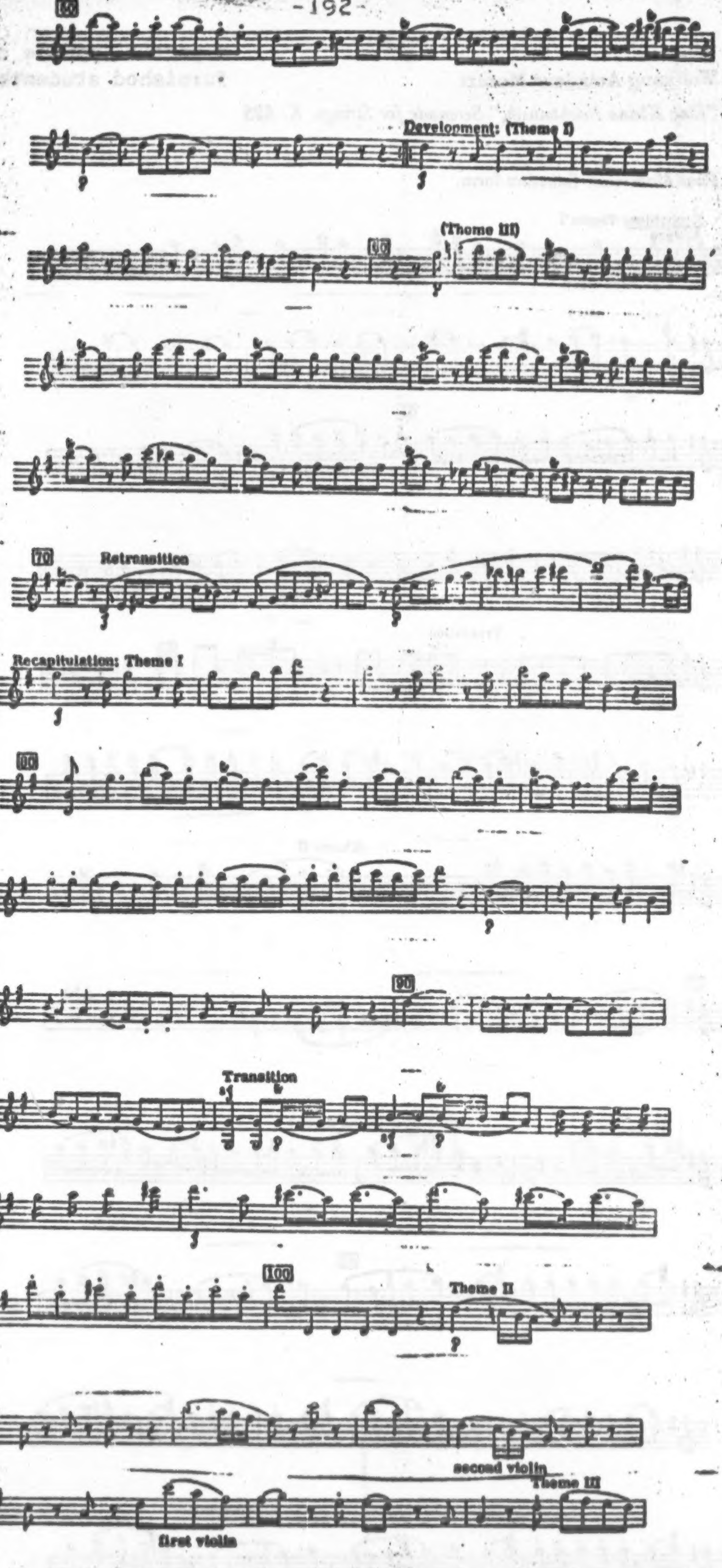
Wolfgang Amadeus Mozart

"Eine Kleine Nachtmusik," Serenade for Strings, K. 525

First Movement: Sonatina form.


Exposition: Theme I
Allegro
first violin
10
Transition
20
Theme II
30
Theme III (Closing theme)
40

2.


Development: (Theme I)
(Theme III)
60
70
Retransition
Recapitulation: Theme I
80
90
Transition
100
Theme II
second violin
first violin
Theme III

41. After bar 109 how many times is theme III repeated?

42. Can you hear these items we have discussed without the help of the line score?

43. Does the line score help you to hear anything in music?

44. Measure 116 is like measure 43 and so we expect the same kind of ending as in 51-53. The melody from 54 is in 127 and repeated in 129. However bar 55 wouldn't make a complete ending (the piece didn't really sound finished back in bar 55) and so Mozart adds new material called a Coda. This material he steals from the second bar of the piece.

45. How many phrases or stopping spots did you notice in the piece?

Definite and measurable objectives on Factual #1 Classicism

1. The years of the Classical Period.
2. Characteristics of the period.
   - a. If everyone used common sense and good taste, the world would be a better place.
   - b. There must be a rule for everything--including a rule for acting and thinking.
   - c. Music must follow rules and be understandable to the mind.
   - d. Form of music could be perceived by the mind, emotional qualities of music like sadness were minimized.
   - e. Everything dignified, formal, restrained; the people, their dress, architecture, art, etc.
3. Musicians of the Classical period discovered:
   - a. The right combination of instruments to sound right--the symphony orchestra.
   - b. A musical from which could express the ideals of classicism best--the sonata.
4. The greatest composers of the period were: Gluck, Haydn, Mozart and Beethoven.

Definite and Measurable Objectives on Factual #2

1. Why does Bernstein call it exact music rather than other terms?
2. Is all exact music played exactly the same?
3. Is folk music exact music? What is folk music?
4. Are Bach and Handel classical composers?

5. Describe a fugue (at least in Bernstein language, more if possible).
6. The Marriage of Figaro is an opera (true or false).
7. An overture to an opera puts music together into one piece from the rest of the opera (know what an overture is).
8. How did Haydn surprise listeners with his symphony # 94? What other musical ways are there of creating surprise?
9. Number of symphonies Haydn wrote.
10. What humor devices did you hear in Haydn's #102?
11. Beethoven stretches all the classical rules almost to the breaking point. Some idea of what is meant by stretching in music.

Definite and Measurable Objectives for Factual #3

1. Understand that Mozart was a real genius in music--wrote equally well in many forms.
2. Mozart was a fine keyboard performer as well as composer.
3. Mozart had a fine ear. To musicians this means having the ability to hear and retain the melody, rhythm, harmony, what instruments are playing, etc. In Mozart's case, he could retain the entire number, not only the melody.
4. Mozart composed the operas Idomeno, Marriage of Figaro, Don Giovanni, Magic Flute.
5. Mozart lived in Salzburg and Vienna Austria.
6. Mozart and Haydn were good friends and influenced each other musically.
7. Mozart lived at the time of George Washington--the Classical Period.
8. He received his training from his father.
9. Types of music he wrote and some idea of each, symphonies, concertos, (violin and piano primarily although others as well) string quartets, divertimentos, serenades, operas, a mass.

Unmeasurable

1. Hear the Mozart music on the record.
2. See the filmstrip and get a little better idea of the life and times.

Definite and Measurable Objectives for Factual #4

1. Period in which Haydn lived.
2. Where Haydn lived (Vienna and Esterhazy Hungary).
3. Haydn worked in the patronage system, his patron was Prince Esterhazy.
4. Advantages and disadvantages of the patronage system.
5. Training as a choir boy with some work in the Italian vocal style under Porpora.
6. Haydn's work improved by copying Mozart.
7. Wrote symphonies, quartets, trios, divertimentos, serenades, concertos, sonatas, operas, masses, oratorios.
8. Later symphonies written for London (Salomon concerts) were among his best.
9. Wrote oratorios Creation and The Seasons.
10. Wrote at least 104 symphonies, some say 120.
11. Wrote the surprise symphony which is #94 and probably most of those we hear the most are numbered above 94.

Unmeasurable

1. Hear the Haydn music on the record.
2. See the filmstrip and get a better idea of the times.

Instruments of the Orchestra Factual #5

Instruments of the orchestra cannot really be taught in a single lesson. The instruments sound too different due to registers and special effects. We hope that the material can be integrated into every listening lesson and the sound of as many instruments as possible pointed out to the students.

Our only concern with this lesson is that we begin to teach the material that will allow us to say "listen to the clarinets in this passage" and the students know clarinets from oboes.

A certain amount of factual information may be necessary to make the class a good class but all of you have taught this any number of times and know more about it than I do. I would expect that at this time you might show them a picture of the instrument or any other device that helps them remember.

On the tape:

Violin--Haydn Violin concerto #1
Mention Stradivari's time as about 1690, violin invented about 100 years earlier.
Famous makers in Cremona Italy, Amayi and Guarneri.

Cello--full name violoncello, not violincello.
Invented or developed about the same time as the violin only was first used only for accompaniment. (I think I used Beethoven 5th and perhaps Wagner Prelude to Tristan for this.)

Flute--Mozart Flute Concerto
One of the oldest of instruments, 10,000 BC? Blown like a recorder through Bach and Handel's time for the most part.

Oboe--Mozart Oboe Concerto
Double reed, sometimes nasal sound, an ill wind that nobody blows good.

Bassoon--Mozart Bassoon Concerto
Another old one, means bundle of sticks but looks like a bedpost (pre Hollywood)

Clarinet--Mozart Clarinet Concerto
Invented about 1690 by J. C. Denner. First used in the orchestra by Mozart and prominence came about this time.

French Horn--Haydn Hunting Horn Concerto
Uses natural horn, which it really was or a combination of horns until late Beethoven or even later when the valves were added.

Trumpet--Haydn Trumpet Concerto
Was really only a bugle until they added valves about the time of the Classical Period.

Trombone--Russian Easter
The oldest instrument which has retained its present shape.

Definite and Measurable Objectives for Factual #5

1. Students be able to recognize common orchestral instruments by sight.

2. Students be able to recognize common orchestral instruments by sound--at least if they are playing in middle register without any special effects.

Definite and Measurable Objectives of Factual #6

1. Students should have some idea that in better music, there are more things to hear and that he can hear something new in each listening. More obvious music is usually of lower quality.

2. Haydn used folk tunes in his music and yet followed strict rules of composition.

3. Can hear the difference between Haydn and Bach on the example used in the lesson.

4. Know that there is influences of both the common man and the nobility in the music of the Classical Period.

5. Know that contrast is a basic principle of composition. Composers obtain contrast by contrasting types of music (vigorous dance with lyrical melody) fast and slow, loud and soft, 1 instrument against an orchestra, etc.

6. Know what 2 part music is.

7. Know when composers followed strict rules. They than began to break rules but tried to do it so it wasn't noticeable. Perhaps a musical example like making an 8 measure phrase 10 bars long would hold.

8. Know that Mozart and Haydn melodies are better than other composers, their harmony more subtle, and the fact that they did cleverly break rules.

9. Form means that there is a definite balance and shape to music.

10. Hopefully hear an answering phrase in Eine Kleine Nachtmusik.

11. Know that 3 part form is (a)theme in home key,(b) new melodic material and (c) return of theme to 1st key.

12. Know that first movements of most symphonies in sonata form.

13. Know that expert listeners try to listen for as many things as possible at once, they may be able to listen only to 1 or 2 items at a time.

Definite and Measurable Objectives of Factual #7

1. Know that sonata form is Exposition, Development, Recapitulation.

2. Know that Exposition is main theme; Development is parts of themes and changed themes and that Recapitulation is return of main theme.

3. Be able to hear a theme--maybe the development and return.

4. Be able to define symphony as a sonata for orchestra, 4 movements fast, slow, minuet or scherzo and fast.

5. Haydn is father of the symphony.

6. Know what dynamics are and that they originated with the Mannheim orchestra.

7. Know the names of some of the best symphonies of Haydn.

8. Know the names of some of the best symphonies of Mozart.

9. Know that orchestration means right tone color and combination of instruments.

10. ERROR on p. 4, Example 2 of your script. There is an example of only the exposition of a Haydn symphony.

11. Know that concertos and symphonies were the two most popular forms of music in the Classical Period.

12. Know that a concerto has 3 movements--1st is fast in sonata form, 2nd slow and 3rd fast and dance-like.

13. Recognize a cadenza, know what one is and what type of music it might occur in.

14. Define chamber music. Know the 4 movements, fast (sonata form) 2nd slow, 3rd scherzo and 4th fast.

15. Hear difference between a piano and a clavichord.

16. Know what a recitative is--half music and half speech to emphasize speech. It tells a story and connects arias.

17. Know that an aria is a song for 1 or 2 persons.

18. Know that an opera also has ensembles (3 to 8 persons) and choruses. Hopefully hear these differences.

SAMPLE LESSON

EXACT MUSIC OF THE CLASSICAL PERIOD

We have spent some time talking about when the Classical Period in music occurred (1750-1825), about some of the world events that were going on at that time that influenced the musicians and some facts about the lives of Mozart and Haydn that help one to understand why they wrote the kind of music that they did. We would now like to talk about the music they composed, what makes it different from other "exact" music, how one can tell an opera from a divertimento, the kinds of music Haydn and Mozart wrote, what to listen for in music and so on.

There is really no logical order in which to learn about the music of Haydn and Mozart as nearly all of the important things to listen for are in every piece of music. It is easier to listen for only one thing at a time when we listen to music and that is what most of us should probably do. The more expert listener you become, the more things you will be able to listen for and hear all at once. One of the distinguishing things about exact music is that no one can listen for everything at once and so even the most expert listeners hear something new each time they listen to a piece of music. This is one of the main differences between good and bad music; with inferior music one can hear and understand everything the composer does in a few listenings.

There is more to listening than just having a good ear to recognize a melody or tell whether the note went up or down. The more one knows about something, the more he enjoys it. Those of you who know a lot about baseball can really enjoy watching a baseball game, either at the park or on television. You know what to expect and if something unusual happens, you really enjoy it, you laugh about it, talk about it to someone else, think about it in your spare time and compare it in your mind to other baseball games you have seen or heard about. One doesn't expect a pitcher to pitch an entire game and give up no hits nor do you expect a batter to get a home run everytime he comes to the plate. If you do see a game where either of these happens, you appreciate the fact that the pitcher was really a good pitcher or the batter a good batter. However, if you knew nothing about baseball, you wouldn't know what was good or bad, commonplace or unique. If you saw a game with only 3 hits by one side, would this be good or bad? The same is true of music, the more we know about music, the batting average of the various composers and performers, the better we can enjoy kinds of music, the better one can appreciate the music he hears. The best educated person knows a lot about all things, music, art, science, business and so on. We also know that the better educated person is more apt to be successful in life AND enjoy that life.

One of the characteristics of Haydn that we should remember is that he used folk tunes in his music. If we know that Haydn used folk tunes in his music, we can compare all other composers who used folk tunes with Haydn. While working with the Esterhazy's, Haydn came in contact with a lot of Croatian folk tunes. He new that everyone, nobility and common folk alike, likes to hear a familiar melody. He used these familiar, popular, tunes of his day in his music while still strictly following the rules of composition. If a composer uses a melody that we know, it will be easier to remember and recognize as we hear it reappearing from time to time in a long piece of music. Folk tunes also have good rhythmic accompaniments.

Let's listen to 3 dances, the first dance is a composed dance by Bach. The next two are dances by Haydn using folk tunes.
Can you tell the difference?
Can you hear that Haydn really "swings"?

Contrast is a basic principle of music composition. Nearly all music needs at least two different parts. Even having two parts is rarely enough to sound like a complete composition and composers usually put more than two together or repeat one of the parts. One can hear contrast in Eine Kleine Nachtmusik by Mozart. First there is a vigorous dance and it is contrasted with a lyrical melody. The lyrical part was originally only played with 3 instruments, hence its name trio. This piece then ends with the vigorous minuet being repeated.

(This piece is not on the tape and need not be played here.)

Writing two-part music isn't difficult as the composer only has to worry about two melodies and they are often short. Two-part music was the bread-and-butter type of work for both Mozart and Haydn. However, if two part music is easy to write for Haydn and Mozart, why wouldn't it be easy for everyone? Of course it is.

Listen now to this two-part music Mozart's Minuetto from Eine Kleine Nachtmusik.

Did you notice how regular and formal this piece was? Both parts were 8 measures long, both parts repeated, both parts ended on the key tone or do, and so on. Much of Mozart and Haydn is very exact and formal like this piece. However, when we try to decide why Haydn and Mozart were better than other composers we find these three reasons:

1. Their melodies are a little better and more elegant.
2. The harmony that they added to their melodies is a little more subtle.
3. They cleverly broke some of the rules of composing.

Haydn and Mozart did break these rules but had to do it in such a way as not to make the listener uncomfortable. We normally expect an eight-bar phrase with a cadence at the end. Listen to this number by a classical composer and notice that he has extended the phrase to 10 bars which is easy to do but we expect the cadence to occur at the end of the 10th bar but instead we get a surprising chord, a complete change of style, a lot of new material and the chord that we expected doesn't come about until bar 43, 28 measures late.

Play Beethoven Violin Concerto in D major on tape.

Being able to recognize these familiar tunes and rhythms is important but it still doesn't tell us much about what makes music great. One of the most important items for a composer to consider is form. Form means nothing more than that there is an orderly fashion to the way sounds are put together, that there is a definite shape and balance to a piece of music. Man has form and balance, he has a left arm to balance the right arm, a left foot to balance the right. He has only one head which is put in the middle of his body so there is balance. Music of the classical period is strongly governed by form. This is easiest to hear in short pieces because we can remember what the whole number sounded like and can picture in our minds or our ears whether the piece was balanced or not. The longer the music, the more difficult this becomes and is one of the reasons we have to listen to some music over and over to understand the shape or form.

Classical music is often composed with a motive answering a motive, phrase answering phrase, cadence answering cadence and so on. When one phrase ends on a half cadence, it is usually answered by a phrase ending with a full cadence and then we have what is called a balanced or symmetrical period. When we have a period answered by another period then we have simple two-part form.

Listen to Minuetto from Eine Kleine and see if one can hear phrase answering phrase, cadence answering cadence, and period answering period.

Part I is, to a certain extent, final sounding because it ends solidly in the home key. Yet we do not accept it as the end of the form because the music has not been in progress sufficiently long to call for a full stop. However, when the very same cadence appears at the end of Part II we can accept its finality because it completes a symmetrical pattern involving two periods. Here is an example of the simplest kind of counterstatement, an answer by literal repetition. To be sure, the slight harmonic digression at the beginning of the second period makes a great difference, enough to give the cadence of Part II a greater feeling of weight and arrival. As you listen for the harmonic flow of classical music, you will become aware that the broader and bolder a harmonic digression is, the stronger will be the cadence which eventually brings matters back into balance.

Before we compare this number to one slightly changed, let's listen to the difference between a piano and a harpsichord. The same number, a Sonata by Haydn will be played first on the piano and second on the harpsichord. Notice that the harpsichord can't go as fast as the piano.

Now listen to Haydn's Rondo from Sonata for Clavier in D major played on the harpsichord and listen to the form.

Certainly this is different from the Mozart example. First we cannot make out perfect balance between Parts I and II, because Part II is longer again by one-half. How did this come about? Well, the cadence at the end of Part I doesn't end in the home key but rather in the dominant key. Therefore, Haydn explores the new key and then must make his way back home which takes extra music. The mathematically perfect balance of the equal parts was destroyed but because we are satisfied that he finally returns to the home key, we get a sense of balance or completion. It may be necessary for the composer to reintroduce the first melody again to give you a clue that he is back in the home key which is what Haydn does in this example. When we have this theme in the home key, some new melodic material or themes in a different key and then the return of the first theme in the original key, we have 3-part form which musicians call A B A form.

If one were to expand this small 3-part form and make each section longer, we would have what is called Sonata from which is one of the primary contributions of the Classical Period to music. The first movement of most symphonies written at this time is in strict sonata form where the first theme and most important theme is played in the home key, then there is a contrasting section in another key with a theme of its own and then in the recapitulation or return one hears the first theme in the home key and if the second theme is also present, it is in the same key as the most important theme. The first movement of the Quintet in E^b major is a good example of Sonata form, the two themes, one in hunt style and the other in a singing style are the contrasting themes. This contrast which we hear in the Quintet is not a hard and fast rule for the classical period but it does become more true in the period that follows Classicism, form 1825-1900. Haydn sometimes violated this rule and used the same theme but he still followed the same form as the second time the theme was in a different key, almost always the dominant key.

QUESTIONS TO PONDER

1. Why is it important to know as much as possible about music?

2. T F It is easy to hear a lot of things at once in music.

3. T F There are more things to hear in the "better" music.

4. T F Using folk tunes is characteristic of Haydn.

5. T F One can hear both popular and formal elements in the music of the Classical Period.

6. T F Mozart and Haydn tried to please the public as well as the nobility with their music.

7. T F Composers often try to cover up some of the familiar tunes in their music.

8. T F Comic operas were written in a very formal style.

9. T F Contrast is a basic concept of music.

10. T F One expects phrases to be 10 bars in length in classical music.

11. T F Recognizing form in music is one of the most important things to listen for.

12. T F The more a composer digresses from the main melody and key, the more emphatic we expect the return to the home key to be.

13. What is sonata form?

    a. expanded 2-part form
    b. expanded 3-part form
    c. expanded 4-part form

CHAPTER IV

INTERPRETATION

In scrutinizing the results of the study, a large number of equivocal items can be found for which several different interpretations are equally appropriate. Little will be said about these beyond a brief reference, since no conclusions can be drawn from them. If the study had been confined to the design of the original proposal, and only two schools used, much more orderly results would have been obtained from which spurious conclusions would have been deduced. The addition of three schools allowed for greatly increased data, much of it blurring the conclusions rather than clarifying them but offering opportunity for a more realistic appraisal. The study identified more problems than it solved; some of these will be briefly alluded to. The chapter will be organized under the following headings: teachers and students, materials, ordering, and item results.

Teachers and Students

As previously stated, the teachers were above average in their skills and also in their cooperation. They spent many hours of preparation time beyond what they would have had to spend in a routine situation; they were very interested in all the evaluative measures and the suggestions of observers; they continued throughout the year to improve areas in which they or their classes seemed weak, and to "plug the gaps" which were made apparent by testing. They generally had excellent physical facilities and a time schedule much more generous than the average. Available to them, in addition to the detailed lesson plans, were a wide variety of supplementary teaching materials and aids, as explained in the previous chapter. In interpreting results, one must conclude that the teaching situation was markedly superior to the average elementary music program as it presently exists.

This is not to say that each teacher and each classroom did not have peculiar weaknesses as well as strengths, the cognizance of which will help in interpreting results. Teacher 1 was a half-time teacher in a University community who could spend much more time in preparation than the other, full-time, teachers. The students she taught represented the highest collective I.Q. of any of the five schools, yet she was faced with the situation of one "slow" class for which all of the materials had to be rewritten in simplified form. On standardized I.Q. and achievement tests this "slow" class was above the national average, but they were habitual underachievers. To cope with this situation, the classroom teacher was enlisted in a cooperative effort to teach unfamiliar words or concepts needed in the musical learnings, and a different preparation was made for the class by the music teacher. The class remained low in achievement as compared to others in the project. Teacher 2 had the most impressive academic bacground of the five. She had been through the doctoral program in music education at the University of Illinois, understood thoroughly Meyer's theory of expectation, and had much experience as a clinician for sessions on listening and appreciation. She was most interested in, and able to utilize, the materials used in listening. The students in school 2 were largely children of university faculty, and were characterized by verbal skills, willingness to discuss and contribute to the class dialogue, and sophistication regarding materials and testing. These students might be considered "over-participators." Observation of class work in school 2 invariably gave the impression of high level achievement, but this impression was not corroborated by test results. The impression may have been due to a few advanced students who carried the burden of class participation, or to the general atmosphere of the laboratory school which fosters more freedom and independence of response. An unusually high percentage of students in school 2 study piano or instrumental music. Teacher 3 was superior to the other teachers in presenting the factual materials. She was able to introduce a variety of interesting activities which captured the students' attention and promoted effective learning. She was, on the other hand, somewhat uneasy with the keyboard unit. The students in school 3 were fairly average in respect to the number who had private music lessons outside the school situation, as were also the students in school 4. Teacher 4 was the least well equipped to cope with the materials in the project, although she was willing to shoulder the responsibilities of preparation and evaluation. Many of the ideas and some of the terminology used in the project were foreign to her, and in several instances were taught incorrectly for this reason. Teacher 5 can be cited as exemplifying the elementary music teacher today. She was well-trained, had many years of experience, and was skillful both as musician and teacher. Initially, teacher 5 was opposed to the keyboard phase of the project, but became a strong proponent of this activity as she worked with it. School 5 has recently modified its elementary music curriculum on a permanent basis to utilize some of the materials used in the project. The students in school 5, like those of school 1 and 2, were above average in home advantages and outside musical experiences.

Materials

The materials used in the study were not radically different from that considered to be the standard content of music. Aural and factual materials were comparable, if not identical to those found in the typical grade school song texts and teacher's manuals. The keyboard materials represented a class piano approach, following closely the method of Robert Pace. The listening materials included familiar songs and Classical works generally accepted as suitable for grade school listening, such as the Haydn Symphony Number 94 and Mozart's Eine Kleine Nachtmusik. The stated objectives were without exception comparable to those listed in curriculum guides, in methods books, and in teacher's manuals; no dissent was voiced by the teachers as to any lack of feasibility of the objectives.

The study was unique in two aspects. First, it confined itself as narrowly as possible to music of the Classical period, and those objectives which could be accomplished within this limitation. Second, it emphasized actual achievement of the objectives and frequent measurement to discover what achievement was taking place. No claim is made for the superiority of the materials over other existing materials; they are, however, deemed more appropriate than other existing materials for the accomplishment of the specific stated objectives of the project.

In addition to the rewriting of materials for the "slow" class in school 1, other materials were revised during the course of the year's trial period.

Aural. A set of reading and dictation exercises, all in the key of C, was among the materials used initially for the aural emphasis. It seemed logical that visual and aural perception of tonal patterns could be more easily achieved when the students could concentrate on one key relationship, without having to adjust to changes of key center. Once certain patterns began to be recognizable, it was felt, the time would then be appropriate to begin transfer to other key centers, on the staff and also aurally. Because some of the teachers demurred from this approach, the reading and dictation exercises were modified to include practice with several of the more frequently-used keys, the identical patterns being retained but transposed. Use of several key centers did not prove a successful avenue toward music reading; because the exclusive use of a single key was abandoned too early to judge its effectiveness, there still remains the possibility that this latter may be the more efficient method for teaching reading and the accompanying aural concept.

The tonal configurations identified by Petzold[1] were used early in the year, both as patterns for reading and patterns to be heard in music played. Since these configurations have been stipulated to be those most commonly found in grade school songs, recognition of them seemed to offer many opportunities for visual and aural transfer. Emphasis on them was minimized in later lessons, however, because transfer failed to take place. Small alterations in the configuration prevented it from being recognized for what it was; for example, a change of the rhythmic value of one or more notes, a change in the approach to the configuration, the interjection of a bar line or a rest, the separation of the configuration visually between two staves, tended to change the appearance or the sound of the configuration sufficiently that students failed to recognize it. Developing an accurate perception of pitch and rhythm symbols is difficult and requires much time for even a little progress. Such auditory-visual achievement was generally not accomplished in this project.

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[1] Robert Petzold "Development of Auditory Perception of Musical Sounds by Children in the First Six Grades," USOE Project #766.

The materials were designed to demand a minimal amount of time for mechanical details such as note names, time values, key signatures, etc., so that the teacher could give primary emphasis to musical concepts, e.g., the entity of the phrase, metrical feeling, cadences, foreign tones, similarity and contrast, high points in a phrase, skipwise and scalewise motion, etc. The objective was to use vocal music as a medium for increasing musical understanding generally, and for improving listening skills. However, students lacked the necessary prerequisites for this approach; learning the basic terms and mechanics, whether through the process of straight drill or within a musical context, consumed all the time available so that none was left for introduction of general concepts. After the first nine weeks, a shift in emphasis was made from terms and definitions to listening for recognition. Activities focussed upon hearing the similarities and differences in simple songs, and avoided as far as possible the necessity for using technical terms. This also helped to increase the stress on developing tonal memory, which had not been emphasized adequately with the original material.

An excellent opportunity was provided to compare the achievement of these average 5th and 6th grade students with much younger, volunteer students enrolled in class piano at the University of Illinois. The methods, materials, and individual time allotment were similar, but the differences between the two groups were striking. Concepts and skills that were easy for the volunteers were often exceedingly difficult for the public school students. This comparison probably offers a clue regarding the other areas of factual, listening and aural skills--the volunteer situation is characterized by advantages of both a favorable psychological situation and greater ability.

Training the ear was the primary objective. Much of the playing was by rote and by position; reading the notation was introduced relatively late in the unit. Because there were some classes, as for example one in school 2, where all but a few students studied music privately, a large number of keyboard lessons were prepared with the expectation that such classes might move rapidly. However, the objectives of class piano are sufficiently different from those of most private lesson situations that the "advantaged" classes did not progress much more rapidly than the average. Eighteen lessons were prepared; approximately nine were normally covered in the nine weeks period. Teachers were instructed to skip certain specified material falling within the nine lessons, and to include some items from the later lessons which were deemed too important to omit. The material on minor chords, from lessons 13 and 14, is an example of learnings stipulated as necessary.

Keyboard. As discussed in Chapter III, supplementary materials were added to the keyboard lesson plans to give more practice items, as these were necessary for achieving the objectives. An inspection of the keyboard lessons included at the end of Chapter III can illustrate the type of revising that was done. The first ten lessons are given as originally planned, then the entire revised set, in which lessons 1 and 2 are little changed except for the addition of definite and measurable objectives, but all the succeeding lessons from lesson 3 on are noticeably different from the originals.

Factual. The defect in the prepared factual materials was vocabulary. Students were handicapped from the start by an almost total absence of familiarity with common musical terms. This problem was, of course, present in the other areas as well, but became more central here where reading and comprehension and intellectual mastery were the focal activities. The terms themselves became an objective for learning rather than an aid to understanding. The revision of this material was concerned largely with simplifying vocabulary without loss of content. The teachers on the whole felt more secure with this area than with any of the others, since it was specific, its objectives both obvious and measurable, and it could be taught through familiar and well-developed techniques.

Many of the factual lessons were accompanied by illustrative tapes; these lessons contained materials very similar in both music and fact to those used for the listening unit, except for the difference in stress. In the factual area, musical tapes were for purposes of illustration; in the listening area, the music was focal and the factual materials were explanatory. One lesson was derived directly from Leonard Bernstein's *Young People's Concerts*[2]--the chapter entitled "What Is Classicism." A tape of all the mucical examples in the chapter was used with the lesson. This lesson proved to be neither more nor less successful than the other lessons of the unit. The lesson on "The Instruments of the Orchestra" at first used for illustration taped examples from the Wheeler Beckett record *The Complete Orchestra*[3], but it seemed advisable to utilize music from the Classical period for these examples. This change offered both shorter illustrations (drawn almost exclusively from concertos of the period) and increased opportunity to hear the Classical idiom.

Listening. Each listening lesson was organized around a single concept or task, such as "Melody," "Time in Music," "Following a Line Score," etc. Each lesson used a variety of musical examples drawn largely from the Classical period. Some of the music heard was presented in its entirety, some was fragmentary, depending upon the use to which it was put. In the original materials, a lesson on "Movement" was included, but the concepts proved to be too difficult for the students, even with such elementary illustrations as "America" and "Londonderry Air." A substitute lesson on "Form" was felt to be important and also feasible, but since it was placed late in the sequence of materials, it was often covered hurriedly or omitted entirely, due to the press of time.

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[2] Leonard Bernstein, *Young People's Concerts* (New York: Simon and Schuster, 1962).

[3] Wheeler Beckett, *The Complete Orchestra* (Englewood, N. J.: Music Education Record Corporation).

Ordering

One aspect of the study was an attempt to determine whether the order in which learning experiences occurred had any effect upon achievement. It seemed probable that order of experience would make a difference, that certain experiences would reinforce or clarify or simplify later learnings, and therefore result in greater achievement. As explained earlier, complete randomization was carried on in only one school; in other schools teachers followed the same sequence for all classes, but started each class at a different unit in the sequence. This was done to lighten the load of the teacher, as the preparation and teaching problems were great. Few of the objectives in the study had been emphasized in students' musical experiences prior to the year's study; even the aural lessons as structured were unfamiliar to most students. For this reason, no one area fit in better than others with the sutdents' prior experiences.

Order was not found to be of significance in the study. Sufficient exceptions occurred in the results of every version of the learning sequence that no pattern of advantage or disadvantage can be seen. The activities and content of the four areas were sufficiently discrete that they contributed little to each other. A slight indication existed that the later in the year the experience occurred, the more profitable it was. Achievement in all areas rose slightly as the year progressed, perhaps because students became accustomed to the more intensive nature of the learnings and the greater effort required from them.

Much statistical analysis was performed that is not shown in the appendix, because it did not reveal any information beyond that given by the simpler statistical processes. Included in the appendix are means, degrees of freedom and t values. Analysis of covariance was used; however, it was not possible to determine the most important factor in achievement, whether music aptitude as measured by the Seashore tests, academic achievement as measured by the Iowa Test of Basic Skills, intelligence quotient, scores on pretests, or other. The highest correlations occurred between intelligence quotient and test scores, and between pretest scores and final scores. These high correlations might be interpreted as lending support to Gordon's contention that knowing the student's actual aptitude is crucial for achievement studies. The Gordon Musical Aptitude Profile[4] may prove to be a valid instrument for measuring aptitude; the publishers would not release the test to the investigator for this project, and its publication date is so recent that no definite statement can yet be made of its value. When analysis of covariance was applied to each of the possible factors, the differences among the classes is further reduced, reinforcing the conclusion that order of experience was not a factor and that the learnings in each area were more discrete or learnings more minimal than had been suspected at the outset of the study.

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[4] Edwin Gordon, Musical Aptitude Profile (New York: Houghton Mifflin, 1965).

Item Results

The primary problems of this study were, first, to define the skills and knowledges which are important to musical listening; and second, to determine whether these skills and knowledges can be taught within a one year period to fifth grade children by any one or a combination of four common methods. A further problem was to determine whether an increase in these skills and knowledges per se results in improved musical istening. It would be erroneous to conclude from the study that those skills and knowledges which the students failed to achieve cannot be taught at this level. At least two considerations must be made in this regard. First, the testing instruments used to measure achievement were not of proven effectiveness, and second, in every area of skill and knowledge there were some extremely high achievers, even when the majority failed to achieve. Therefore, any conclusions must be considered valid only in terms of the time limits, the quality and organization of the teaching materials, and the evaluative instruments used in the study. The teachers and students have been described as average and above, with the latter predominating. As regarding the quality of the teaching materials, teacher opinion was that the materials represented well accepted ideas and practices and were a radical departure only in respect to their intensive nature.

It remains to comment briefly on the evaluative instruments. These were designed to have some questions on each test which would be simple and objective and within the reach of every student, to help determine the instances where students might be answering irresponsibly, at random, rather than making a serious effort. The infrequency of tests in music and the relative unimportance of the grades given tend to foster a frivolous attitude toward tests, in some cases.

To obtain a realistic picture of the project, one should look at every test given in every area. Because easy items were included--straight recognition and recall questions not requiring aural or musical abilities--scores slightly over 50 do not necessarily indicate that the primary objectives the test is measuring were taught. Scores need to be 70 or above to indicate achievement of the specific objectives of that learning period. In making the judgments cited in the succeeding paragraphs, each question was individually analyzed from the 27 classrooms so that where questions from different tests applied to the same knowledge or skill these could be examined and recorded together. A few tests, mainly those for the listening unit, were made up almost completely of questions involving musical skills rather than recall-type questions; on these tests a score may be below 50 and yet indicate progress in the types of skills and knowledges emphasized in the study.

There were no items of learning in the study which were not a realistic goal for some students. Those items whose mastery was a major exception may have represented an element of aptitude rather than achievement, but this did not seem to be the case based upon teacher opinion and the tests given. However, even if such items are genuinely achievement and not aptitude, they are probably not appropriate for inclusion in a course of study for the public school curriculum, where the materials should be attainable by approximately 50 per cent of the students under normal circumstances. Courses of study will include materials of widely verying difficulty, to make possible achievement for the weaker students and challenge for the strong students, but much care should be taken in selecting items which represent exceptional achievement.

Great caution is necessary in interpreting the results of the study and drawing conclusions from them. Twenty-seven classrooms were used in all, and it would be possible to make conclusions as to learnings generally feasible for this age level, based on indicators by a large majority of these classes. Because the study is exploratory in nature and of relatively small scope as far as the number of pupils is concerned, there is real danger in misrepresentation. Exeptional classrooms did exist. Such exceptions may be caused by any number of reasons, such as special stress on some items of learning at the expense of the less tangible but equally important items; review periods immediately prior to a test; minor teacher helps or hints given during a test. Some individual students had sufficient background or aptitude that their achievement indicates the feasibility of teaching musical listening to students of this age. However, the results of the class as a whole are more important in their implication for public school music practices. Results will be explained in terms of the objectives for each area and then in terms of the way these specifics relate to listening as defined by the theory of expectation.

The total list of skills and knowledges appropriate for musical listening, as accumulated in the earlier phase of the study, was obviously much too extensive and difficult to utilize in a one-year grade school course. The common-sense approach was to select which appeared to be easiest or most fundamental, in consultation with musicians and teachers. In evaluating achievement for the year, it became plain that a relatively limited number of skills and knowledges can be mastered within a year's time. This fact has obvious implications for planning a total curriculum--experiences must be selected which are most effective for learning new skills and knowledges and most efficient for utilizing and reviewing those previously learned. It appears that the cyclic philosophy of teaching which proposes a continual return to prior experiences but with added breadth and depth each time would have only limited application to musical learnings. Previous learnings must be continually used if they are to be retained, but the chief emphasis must be upon new experiences which can incorporate new learnings, especially since even simple listening experiences cannot by meaningfully taught until some prerequisite skills and knowledges have been achieved.

Keyboard. Manual coordination was a major problem in the keyboard unit during the first nine weeks of the fall semester. Students had great difficulty coordinating two or three fingers to produce a satisfactory chord or melody, even when they understood it mentally. Interestingly enough, this problem had not arisen with the volunteer students in the laboratory situation at the University of Illinois. This difficulty could not be attributed to lack of maturation, since sixth grade students had as great a problem as fifth grade students. Because the basic objectives of the keyboard unit were aural and intellectual and not actual playing achievement, the lessons plans and the tests were revised to give these greater emphasis. However, by the second nine weeks, the coordination problems disappeared, presumably due to school activities such as writing, art, or physical education which are not used by students in the summertime. This coordination problem was consistent for all groups.

A long list of specific learning objectives was constructed for the keyboard area, since the nature of the activities made specific factual learnings both necessary and feasible. However, the main focus of the instruction was to develop some recognition and understanding of chords and their uses; the drive of the V_7 and the repose of the I; recognition of a phrase (aurally if not visually), of same and different phrases; improvement of tonal memory through rote work and improvisation. Performance activities were for motivation, to objectify intellectual learnings, to stimulate interest and to complement vocal activities. Achievement of those focal objectives cited just above was not attained by 50 percent of the students, but obvious progress was made towards the objectives.

Real learnings:

Knowledge of high and low parts of the keyboard.
Knowledge of finger numbering system.
Ability to play melodies such as "Little River Flowing," "Lightly Row," "Old MacDonald," "Hot Cross Buns."
Recognition and understanding of sharps and flats.
Ability to play I chord and usually the V chord in both hands, in C.
Recognition and understanding of treble and bass clefs.
Ability to sing a scale.
Ability to finger a tetrachord.

Knowledge of rhythmic note values.
Ability to sing arpeggiated chords.
Ability to play a minor five finger pattern.
Ability to finger a melody from notation.

Marginal learnings:

Understanding of chords and their construction.
Understanding of harmonic movement or relationships.
Locate "A" on the piano but not on diagram or by verbal description.
Feeling for strong beats.
Ability to transpose.
Knowledge that the I and V_7 are the most frequently used chords.
Playing the I and V_7 in D, A, and E.
Finding the next note to a melody by ear.
Learning the letter names of the staff.
Hearing and anticipating the correct harmonic change.
Harmonizing familiar songs with I and V_7.
Playing a scale in several keys by ear.
Harmonizing with chord roots.
Knowing whole-step half-step arrangement of major scale.
Identifying meter.
Identifying phrases in certain stereotyped situations.
Identifying cadences.

Objectives not achieved:

Aural recognition of scale or skipwise melody.
Full knowledge of the meaning of "octave."
Aural recognition of major.
Memorization of the C, G, and F chords.
Aural understanding of the V_7 tendency toward resolution.
Ability to chant the roots of chords for melodies played.
Sing the home tone for a melody fragment.
Aural skill of phrase recognition.
Differentiate between correct and incorrect harmonization.
Notate the I and V_7 chords in bass clef.
Understand purpose of the key signature.
Improvise melodies.
Know characteristics of good melody.
Improvise over an ostinato bass.
Understand inversions.
Identify nonharmonic chord tones.
Understand tetrachord.
Identify chords and cadences.
See repetition in music.
See chord tones in the melodic line.
Sufficient tonal memory to retain and play back heard patterns.
Knowledge of how to change major to minor.
Ability to improvise answering phrases.
Rudimentary understanding of form.
Use of the IV chord.

Students could build chords at the piano slowly with some aid from the teacher. Areas of keyboard performance in which they were fairly strong were: playing familiar chords, playing melodies both within and out of the five finger pattern and learning new melodies by rote with rapidity. All of these activities were rote activities; the mastery of notation did not occur within the nine week instruction in keyboard, although it was introduced and emphasized to a limited extent. In the classroom situation, with some aid or guidance, students did many things very well but rarely to the point of complete independence. Finger numbers did become meaningful to the extent that students could use them to identify songs, a skill not developed with notation. Students were not able to identify the key center, or "home tone," of phrases seen or heard; neither could they tell whether a phrase ceased on the keynote or a note other than the keynote.

In some of the schools, the students became quite proficient at matching a melody heard with the correct notation, at selecting the proper harmonization for a melody (heard), and at identification of meter. In other schools these objectives were not achieved by more than a small fraction of the students; such a disparity indicates that the relative stress placed upon these skills accounts for the differences in quality of learning. On the whole, students did not relate notation with hearing sufficiently to attain even moderate success on group music reading tests of the auditory-visual type. Although, as indicated in the list of "marginal learnings," a sizeable number of students learned the whole-half-step arrangement of the major scale and were able to play a scale in several keys by ear at the keyboard, students generally were not able to distinguish between the pentatonic scale and the major or minor scales aurally. Apparently the emphasis on scales was too intellectual and not aural enough; certainly few scales are ever sung or listened to in the normal elementary music situation.

Modal discrimination was tested by several short tests in addition to those tests for this area shown in the appendix. Students did best on these tests where the kind of music used for identification was a melodic fragment harmonized by a single chord again a departure from the University laboratory findings, where identification was best when several chords were used to establish the tonal center and the modality. A written factual test of ten questions was constructed and given by Professor Lyke. This, together with a formal keyboard quiz (see following pages) was administered during several demonstration lessons; it was deemed indicative of achievement even though only slightly more than 50 per cent of the nearly 900 students in the study consistently scored high on it.

It may be that too much of the keyboard unit utilized rote keyboard activities, and that just at the close of the nine week period students were beginning to be able to verbalize some learnings and translate their activities into meaningful concepts. However, even in those schools where keyboard was taught for the entire semester, the additional nine weeks resulted chiefly in perfecting skills rather than enlarging the understandings and concepts. The keyboard appears to be an inefficient vehicle in terms of time, for teaching the awarenesses desired by this present study.

[illegible]

I [illegible]

1. ____________
2. ____________
3. ____________
4. ____________
5. ____________
6. ____________
7. ____________
8. ____________
9. ____________
10. ____________

II Major and minor chords. Ten chords will be played by your teacher. Each chord will be played two times. Decide whether the chord is major or minor, and write your answer after each question.

1. ____________
2. ____________
3. ____________
4. ____________
5. ____________
6. ____________
7. ____________
8. ____________
9. ____________
10. ____________

III Ten phrases of familiar songs will be played by your teacher. Each phrase is harmonized with the I and V_7 chords. Each example will be played twice. You are to listen to the chords (harmony) and write the chords that you hear in the space provided. The teacher will play a practice question.

1. ______ ______ ______ ______
2. ______ ______ ______ ______
3. ______ ______ ______ ______
4. ______ ______ ______ ______
5. ______ ______ ______ ______
6. ______ ______ ______ ______
7. ______ ______ ______ ______
8. ______ ______ ______ ______
9. ______ ______ ______ ______
10. ______ ______ ______ ______

[illegible]

1. ____________
2. ____________
3. ____________
4. ____________
5. ____________
6. ____________
7. ____________
8. ____________
9. ____________
10. ____________

IV I and V_7. Four chords will be played for each of the next ten questions. They will be mixed up, but only I and V_7 will be used. Each example will be played twice. Write down the order of the four chords using the symbols I and V_7. The teacher will play a practice question. Write four chords for each answer.

1. (1) (2) (3) (4)
2. (1) (2) (3) (4)
3. (1) (2) (3) (4)
4. (1) (2) (3) (4)
5. (1) (2) (3) (4)
6. (1) (2) (3) (4)
7. (1) (2) (3) (4)
8. (1) (2) (3) (4)
9. (1) (2) (3) (4)
10. (1) (2) (3) (4)

[illegible] standing of the Classical period by introducing stylistic characteristics of the period, the characteristic sounds of the instruments, and some rudimentary knowledge of form and the predominating Classical forms. [illegible], [illegible] into the approach typified by books such as Mozart the Wonder Boy and Haydn the Merry Peasant.[6]

Expectation is largely an intellectual process, though sometimes a less conscious one than other intellectual acts. Obviously, students can be taught a great many more "facts" about what to expect in music when a straight factual approach is used than when the student is led to derive the facts from music heard through many repetitions. Therefore, a large amount of factual material was successfully learned during this nine week period, but much of it was not utilized when listening, because the students did not get enough practice doing this to build listening skills. Almost half of each class period was spent on factual items which were then listened for in music selected to illustrate those specific items--tone colors, humourous devices, ways of creating surprise, characteristics of overture or opera, and so on. Even so, the ability to apply intellectual knowledges was lacking in many cases.

Both students and teachers were at home with the factual materials and the activities accompanying them. The best teaching

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[5] Opal Wheeler and Sybil Deucher, Mozart the Wonder Boy (New York: E. P. Dutton, 1934).

[6] Opal Wheeler and Sybil Deucher, Joseph Haydn: The Merry Little Peasant (New York: E. P. Dutton, 1936).

and the most successful learning were largely done in this area. In one situation the teacher prepared additional worksheets for the students because they covered the standard lessons so easily. In at least one school, many students made perfect scores on the final test--a radical departure from scores for final tests in the other areas. Only one teacher had difficulty with the factual unit, due to lack of background and training on her part to even understand the prepared materials.

When straight recall or recognition tests were given, students did well. The one type of testing which caused difficulty was the multiple choice questions with an indefinite number of correct answers. For example, if students were asked to select as many characteristics of the Classical period as were valid, from a list of several, they found this hard to cope with. In some cases, part of the fault must be attributed to the question format--the term "characterics" had been used almost daily for nine weeks when it was discovered through questions on the final examination that students did not know the meaning of the word.

No list of objectives achieved wholly or in part seems necessary for this area. The complete objectives are given at the end of chapter III; almost all of these were achieved by a majority of the students.

Aural. The primary purpose of the aural unit was to use the conventional singing materials to further not only singing ability but also listening skills. Reading experiences such as following a line score; recognizing phrases, cadences, skip and scalewise melody; singing broken chords and harmonizing chords; verbalization about meter, accent, dynamics, characteristics of melody; and so forth; all could easily transfer to listening activities if handled correctly.

Although this phase of the project should have been the most familiar and hence the easiest in which to achieve the objectives, results fell far short of success. In the opinion of the investigator, this was due to the habitual use of singing activities as recreational rather than as intensive learning experiences; old habits and activity patterns were difficult to break, and students failed to take objectives seriously.

As mentioned earlier, an attempt was made to use tonal configurations as an aid to training the ear and improving music reading. The objective here was to give the students a "vocabulary" of familiar configurations which, once learned, could be recognized in music heard and seen. No teacher had success with this approach--first, the students failed to learn the configurations, and secondly, they failed to recognize them when any element of the configuration had been altered from the original pattern. The activity was dropped in favor of others more promising.

The same difficulty--that of failure to build a relationship between aural sounds and their visual stimuli--resulted in very low scores for group reading tests. See question number three, aural final examination, as an example. No matter how obvious the questions were made to teach and to test this skill, many students had difficulty answering correctly. In the time alloted, it was not possible to make the written notes meaningful to students in terms of aural concepts. Relating sight to ear was thus far more difficult to achieve than had been previously estimated. Most students seem to do all of their musical activities by rote with no comprehension of what is going on. Simple tasks such as determining which one of three notated phrases, completely different in shape and rhythm, was being played resulted in scores only slightly better than chance.

This nine week phase did accomplish an understanding of the mechanics of notation, lines and spaces, meter and clef signs; achieved more success than the other units in teaching identification of chord sounds, recognition of melodies as "same" or "different," and gaining a feeling for the relative range of melodies. Assignments involving the actual copying of music seemed to accomplish more than other classroom activities. It was the only way to be sure the entire class was involved and to accomplish individual learnings.

More difficult, and thus less often achieved, was the aural recognition of melodic or rhythmic patterns (as opposed to entire melodies) as "same" or "different." Most students failed to attain this skill. When students were asked to compare heard patterns with written ones as to "same" or "different," the lack of success was relatively complete.

Students could not visualize a melody by syllables, numbers or note names; they could not clap rhythms by rote with the correct accent; they could not mentally "sing" a song silently and determine the meter; they could not sing the tonic center or "home tone" when stopped in the middle of a melody; they could not tell scalewise from skipwise movement; they could not recognize the entity of a phrase visually or aurally.

The activity of vocal chording was thoroughly enjoyed by the students, who became very adept at it. The activity did not lead to recognition of the roots of the chords, nor ability to distinguish the root of the I from that of the V, even when one of the chords had just been sung. They developed skill in finding the I, IV and V chords within written music, but failed at aural recognition of them.

Progress was evident toward the end of the unit in some actual understanding of what was heard. Concepts of high and low, soft and loud, short or long, could not be taken for granted as they usually are. These had to be taught and practiced if they were to be connected with happenings in the music. These connections were beginning to be evident when lack of time brought the unit to a halt.

The only evidence of differences due to maturation occurred in the aural unit. Sixth grade students were willing to try to answer questions which fifth grade students simply gave up on. Some examples of such questions were those pertaining to characteristics of a phrase, to comparison of two phrases, to recognition of melodies by number or letter names. Sixth grade students were also more skillful at auditory-visual discrimination than were the younger students. The possibility exists that the older students were simply more sophisticated about testing than were the younger, but such a difference did not appear in the other phases of the experiment.

As it became clear that music reading--i.e., recognition of the tonal meanings for written notation--was not a feasible objective for the nine week aural unit, materials and activities were revised towards greater emphasis on the learnings which did appear possible of achievement. The evaluative instruments were also revised. These were more limited than the tests for the other areas in their application to musical expectation, but the basic mechanical learnings taught and measured were those which are essential to progress in music reading and understanding, and were therefore both legitimate and necessary. Students, with the exception of one school, did commendably on the revised examinations for the aural unit.

Listening. The primary effort of all the listening lessons was to make listening an active, participating experience; lessons were designed to focus the students' attention upon specific things in the music which they could hear, identify, discuss and understand. Among these things were tempo, meter, rhythm, the role of melody, certain aspects of style and form, and so on. In the course of discussing these things it was also necessary to hear and discuss contrast, harmony, tonal center, melodic characteristics and the peculiar traits of various composers, as well as to develop some skill in following a line score.

The learnings for this area were the most difficult of the four, and required as wide a variety as possible of activity and materials both to reinforce the learnings and to mitigate restlessness and fatigue. Careful listening is hard work which takes more concentration than the students were accustomed to. One result of this unaccustomed work was revealed in these same students' listening the following school year--one teacher reported that habits of concentration remained with the students and they heard much more in the music than would otherwise have been expected. Undoubtedly, such habits could be enlarged and improved upon if the same purposeful approach were used over a longer period of time.

The most unexpected aspect of the study was that implied earlier--the complete inability to apply any concrete learnings to the musical situation. When the first seven measures of Beethoven's Symphony Number 1 was played for one class, the up and down motion of the melody completely escaped them; they had never been taught the concept of "high" and "low" in music nor been led to listen for the direction of the melody up and down. Teachers apparently assume this to be so simple an understanding as to need no mention, but in actuality more than half of this class needed some additional examples and drill in order to correctly understand and identify "high" and "low," "up" and "down," in a melodic line. Similarly, the use of contour lines to illustrate the shape of a melody was a failure. Students were very slow to hear the difference between scalewise and skipwise melody, so that a diagram or contour line gave them only a vague impression of direction and nothing more. Such gaps of understanding made it difficult to teach Meyer's "expectation," for expectation is built upon recognition of both outline and detail in the music--for example, rising melody, large skips, irregular rhythms, crescendos, and the movement of the harmony towards the tonal center all play a role in creating tension and arousing expectation in the listener; when the students were unable to recognize any such characteristics, it was impossible to point out musical movement towards and away from tension points. Again similarly, different phrase endings with different degrees of finality were lost upon the students, for they had not become sufficiently familiar with chord sounds to distinguish the I from the V_7, so that they did not any more expect a pause after the former than after the latter. None of the learnings or activities attempted proved easy, and none reflected the presence of any prior musical learnings. Following a line score had to be taught carefully and deliberately. Work sheets such as that enclosed, on Time in Music, were successful; worksheets similar to that on the Haydn Symphony Number 94 were difficult.

Students learned to recognize and identify melodic ornamentation, wide melodic range, staccato and legato, repeated rhythms, and in some schools, meter. Even the concept of major-minor was achieved, in the form presented in listening test number two. Listening test number three elicited a majority of correct answers on recognition of the classical style, on pulse and on repeated melodies. However, questions were made obvious by the choice of compositions used in the test. In listening test number three, for example, students were asked to compare the first movement of Mozart's Symphony Number 12 with the opening section of Schonberg's Verklarte Nacht, and though a majority of the students were correct on style recognition, there were many items where the differences were not obvious to a majority of the listeners. Listening test number two used two Mozart compositions for comparison, the minuet from Symphony Number 10 and the first movement of the A Major Sonata for keyboard; here the difficulties were great--questions 6 and 7 failed to be answered correctly by more than a fraction of the students.

STUDENT'S LISTENING GUIDE

1. Tell one way that time in music is different from the time one finds from a clock.
____

2. You can look at a painting and see it all at once. Can you hear a musical composition all at once? Why? ____________________
____

3. What are three kinds of musical time? _____ and _____ and _____.

4. Try to name some songs that seem very slow, and perhaps, sad.
__________ __________ __________ __________

5. Try to name some songs that go very quickly and seem gay. ______
__________ __________ __________ __________

6. What invention is used to measure the speed of the beats in music?
______________ (And don't answer, "a speedometer.")

7. A famous composer wrote a piece imitating this invention.
Who was the composer? ______________

8. What is the word that tells whether the beats are grouped in patterns of two's or three's or four's? The __________ signature.

9. How does one conduct 2/4 in music? down-up or up-down (circle the
1 2 1 2 right answer)

10. Which beat in every measure is usually accented? __________

11. How many beats in a measure are there in a waltz? __________

12. How many beats are there in a measure of a march - three or four? (Underline right answer)

13. Name a song that has three beats to a measure. ______________

14. Name a song that has two or four beats to each measure.
____

15. The pattern of sound that the Lone Ranger's horse makes is called (a) tempo, (b) meter (c) rhythm or (d) "Amsterdam"

Measure No's

Haydn Symphony No. 94 Andante (used with a line score)

1-8 1. Which instruments have the melody?

2. Is the melody smooth or separated?

3. Does the melody move by skip or by step?

4. Are measures 5-6 the same or different than measures 1-2?

5. Is the music loud or soft?

6. Is the music fast or slow?

7. Is the meter in two's or three's?

8. Which measures have the key tone in the melody?

9-16 1. Is this section louder or softer than measures 1-8?

2. Is this section like measures 1-8 otherwise?

3. What does FF mean?

4. Is the FF chord on the key tone?

17-32 1. This section has two parts. Where does the first part end?

2. Which measure has a double bar?

33-40 1. There is a repeat sign in measure 40. Where does the music repeat? from measure ______ to measure ______.

2. Which instruments are playing the countermelody?

3. Does measure 40 end on the key tone?

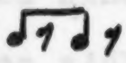
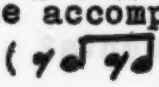
4. This is called "Variation I." What new part was added to make it different than it was at the beginning?

41-48 1. Does this section end on the key tone?

2. Does this section use wind instruments?

3. A dot over a note means to play it separated. What does a curved line, or slur mean?

4. Is there a countermelody in this section?

Measure No's	
49-56	1. The music is (louder) or (softer) here?
	2. Is this section in a major or a minor key?
	3. Is the mood excited or restful?
	4. Do the measures at 53-56 have the same mood as 49-52?
57-74	1. Only a fragment of the melody is used here. Which instruments play it?
	2. Which instruments play a scale?
	3. Which instruments play long, held notes?
	4. In which measure does the excitement die away?
	5. This variation began at measure 49. What things were changed to vary it from the first tune?
75-82	1. Is Variation 3 in major or minor?
	2. Which kind of musical tune is changed here: meter, tempo, or rhythm?
	3. Which instrument plays the melody: oboe, trumpet, or clarinet?
83-106	1. At measure 83 the original melody is back. What is the added melody, played by the woodwinds, called?
	2. In measure 100 there is an example of the "law of the half step." Can you find it?
	3. Is the beat (pulse) steady or uneven in this symphony?
107-114	1. Is this section louder or softer?
	2. Is the melody played by winds or strings?
	3. Is the accompaniment on the beat () or off the beat ()?
	4. Do the violins play the melody or a countermelody?

115-130 1. Listen to the melody here and look at your score. Does it move to a highest note? Where?

2. Which other measure has the second highest note?

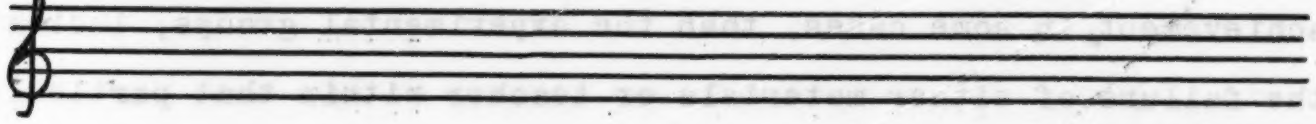
3. Is the mood here peaceful or excited?

131-157 1. Look and listen to measures 135-138. Have you heard a part like this before? Try to find the measures where this happened.

2. The Coda, or ending section, begins at measure 139. Which measure has a hold or fermata (𝄐).

3. What does the music do after the hold: gets louder or die away?

Summary Questions



1. Write the meter signature of this music on the staff above.
2. Write the lst seven notes of the melody.
3. How many measures are there in each variation?
4. Who was President of the United States when Haydn composed this symphony:
   Harry Truman, George Washington, or U. S. Grant?

The final examinations given at the end of each quarter were considered the most significant measurement. Initially, a posttest only design was deemed sufficient, as the materials were so concentrated as not to be comparable to any "controlled" situation. However, as the trial period progressed and it began to be obvious that some materials could not be mastered or were missing their mark, it was felt that a control group was entirely appropriate as an indicator of the comparative value of the new materials for the situation. Accordingly, some of the best classes in each city were chosen to take the final test from each of the four units of the study. Results from the control group tests showed higher achievement, in some cases, than the experimental groups, indicating the failure of either materials or teacher within that particular situation.

In situation 1, listening, the control group did significantly better than one class, was comparable to one class, and significantly inferior to one class; in keyboard, two of the three experimental classes were significantly superior to the control group; in aural and factual, the experimental classes were significantly superior to the control group. In situation 2, the experimental classes were consistently superior to the control groups. In situation 3, one factual class, three listening classes, four keyboard classes and two aural classes were not significantly better than the control groups. In situation 4, one keyboard class, one aural class, and all listening classes were not significantly superior to the control groups.

The one semester keyboard groups did not play a part in determining the role of ordering, but they did furnish information as to the relative difficulty of materials. The eleven additional classrooms provided some stability for the judgments, and helped to illustrate the wide variety of achievement from one test to another, from one situation to another. They strengthened the impression that conclusions drawn from a small sample would contain many possibilities for false assumptions.

The final test was a listening test designed to illustrate many of the primary objectives of the year's trial. It tests few of the elements per se identified in the first phase of the study, but was simplified to procure more accurate measurement of the skills and knowledges within the learning ability of the students. Music used for the listening test was the third movement, Haydn's Symphony Number 102. It was chosen because it contained many obvious items for listening, and at the same time was of high artistic merit. Students were asked to listen to short sections (usually eight or sixteen bars) and answer specific questions concerning that part of the music. They followed a line score for these questions. Marking was made as simple as possible. The test was not a speed test; students were allowed to listen to the music over and over in answering the questions. Part of the test was a comparison between the above-named movement and the third movement of Beethoven's Symphony Number 3. A copy of the test may be found at the end of this chapter.

Students were unable to locate the end of the phrase within the first sixteen bars; not more than 2 per cent even guessed correctly on this question. Neither were they able to tell at which point the harmony changed, after several measures of repeated I chord. The question pertaining to instruments playing the melody was felt to be a difficult one, as the flute blended well with the violin on the recording. However, a respectable number of correct answers was obtained for this question. On the other hand, an even larger percentage of students answered that the drum had the melody--showing a total lack of understanding the concept of melody. The questions just described represent the easiest ones; later questions were slightly more sophisticated and the results from these largely chance.

Teacher opinion was that the test was difficult. Every attempt had been made to simplify it as much as possible while still retaining questions which could actually measure listening. The same eight or sixteen bars of music were used for several questions, and students might have as many repetitions as they needed. Notation was given as an aid in answering some of the questions; obviously it was no aid to the student for whom the notation remained meaningless. The investigator's opinion is that the test could not be simplified further and yet measure listening ability. The difficulty lies in the act of listening rather than in the test.

Blank Score Test

Adapted from the testing procedure with the experts was the blank score test. It was originally planned for use at the end of each set of experiences, as a common measuring instrument for the four units, but was used only twice--at the end of the first two phases--due to the pressing need for more instructional time. Scores on the blank score test given in the appendix are quantitative rather than qualitative, as in most cases the students giving the most answers either heard more or could verbalize more.

Actually, verbalization was not mandatory, for the student was instructed to simply make a mark where he heard something significant if he did not have time to write out a word or words or develop his own code system; the music used was such that the test grader could tell whether marks had been made at random or were genuinely meaningful. An inspection of the sample test included will show that this version of the blank score test differed from that given the experts chiefly by the addition of numbers for every tenth measure. The numbers were also on the tape, so that listeners had frequent opportunity to find their place, if lost. The music was usually played six times.

Results indicate that the blank score test was much more successful than the final listening test, in eliciting correct answers and focussing attention on the music. The sixth grade students made a greater number of reponses, and also more correct responses, than the fifth grade students. In addition, they improved noticeably from the first to the second of the tests. Objective grading was a problem, particularly in determining the existence of an item, no matter how trivial, that a student claimed to hear. The tendency to guess rather than listen seriously existed in particular classes or particular schools, though for the most part students seemed to make a genuine effort at following the music and indicating what they heard. Where students did guess, they tended to use one or two items which had stuck in their minds from the instructions. "Soft" and "loud" seemed to be favorite terms for guessers; these would be used at random although the particular number played for the blank score test, the Mozart Sinfonie Concertante, is especially devoid of pronounced dynamic

Name________________

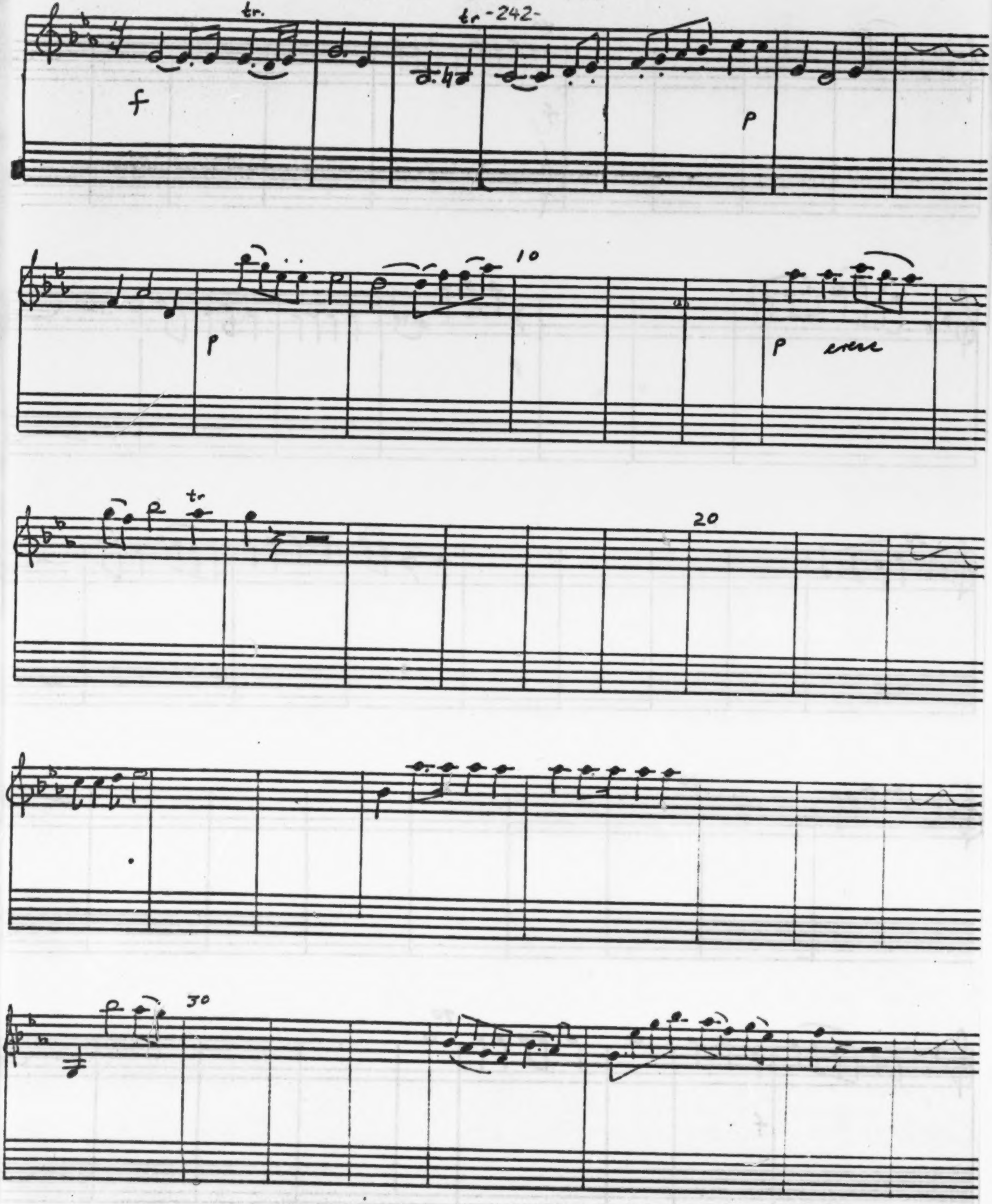
School________________

This blank score test which you are about to take is probably a new kind of test for most of you. You will listen several times to a piece of music. The blank score, with numbered measures and some music written in, will help you follow the music. We want to know what you hear in the music, so we have left space below each bar for you to write in what is going on in the music. It is not important that you mark something in every bar, just fill in the places that you feel are important. You can make a check mark and devise your own shorthand system to mark the music as it is played, and you will then be given time after each playing to go back and write in your answers. Some of the things you might hear in this piece are listed below. Read this list over to yourself carefully before the test begins.

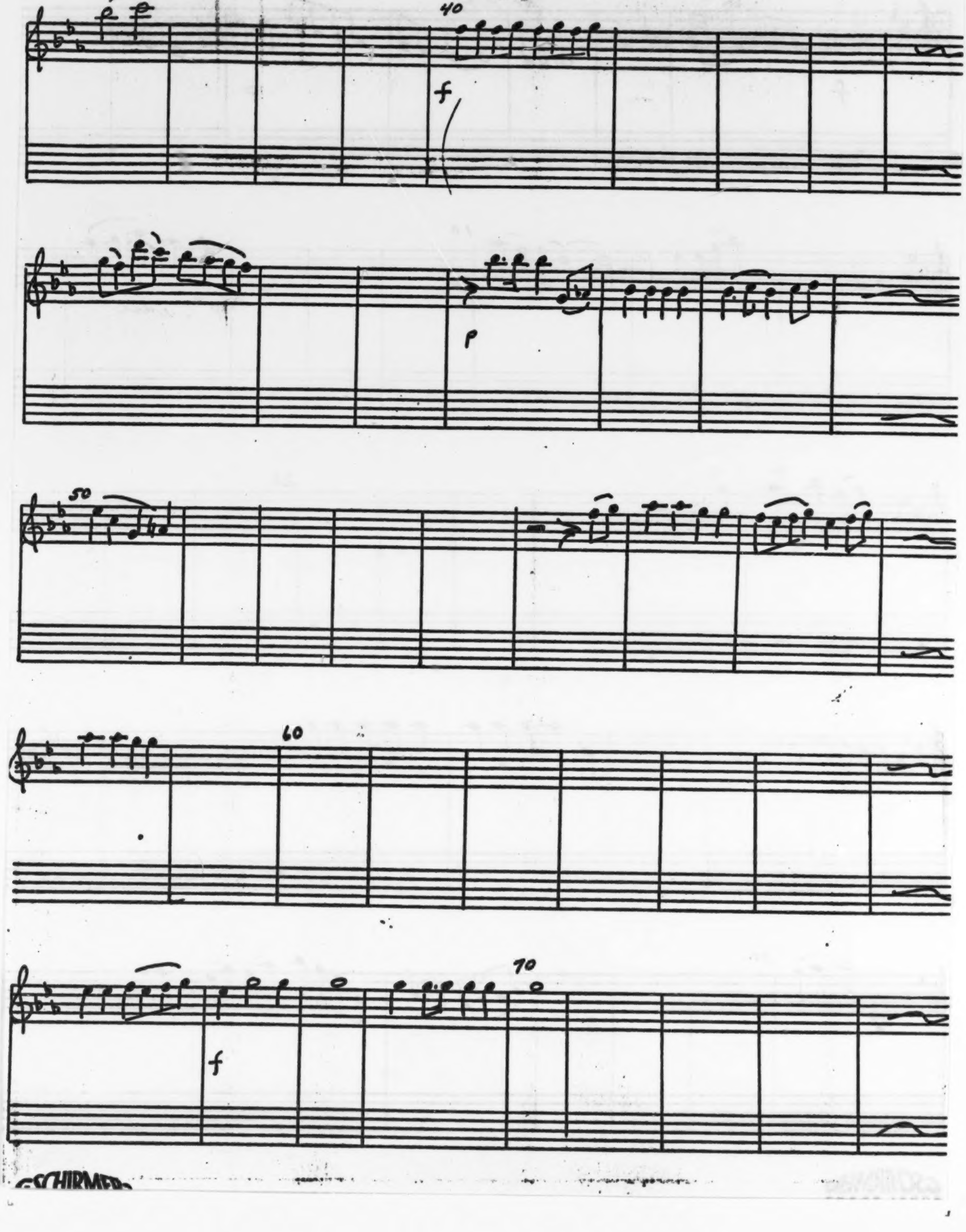
1. Name the instrument that has the first theme at the beginning.
2. Mark the places where cadences appear and what kind-if you know.
3. Mark where the first theme recurs in the piece and what instrument is playing it now.
4. Mark the second theme and what instrument plays it.
5. What is the meter of the number?
6. Mark important rhythm patterns that recur.
7. Mark any unexpected harmonies or chords.
8. Is the number in major or minor?
9. Can you put brackets around a phrase?
10. Does the number modulate to a different key, and if so where?
11. Is the piece jerky or smooth?
12. Is the melody scalewise or skipwise generally?
13. What sections of the orchestra seem to have the most important part in this number?
14. Mark the keytone, in some important places.
15. Can you mark some high points or bracket the sections where there is movement toward a high point?
16. Mark the relaxed or temporary stopping places in the music.
17. Mark two sections that contrast or are opposites with the numbers 1 and 2.
18. How large an orchestra is playing would you guess? Can you name most of the instruments you hear?
19. Mark some very loud and some very soft spots.
20. Some general remarks about the music like
    Is it dance-like or march-like?
    Is it probably composed in the Classical period?
    Does it have vertical harmony or harmony like when one sings a round? or some of both?
    Do instruments sometimes have solo parts?

You will hear the music five or six times so you can listen for three or four items each time. Put down what you hear--not what you think the teacher wants you to hear.

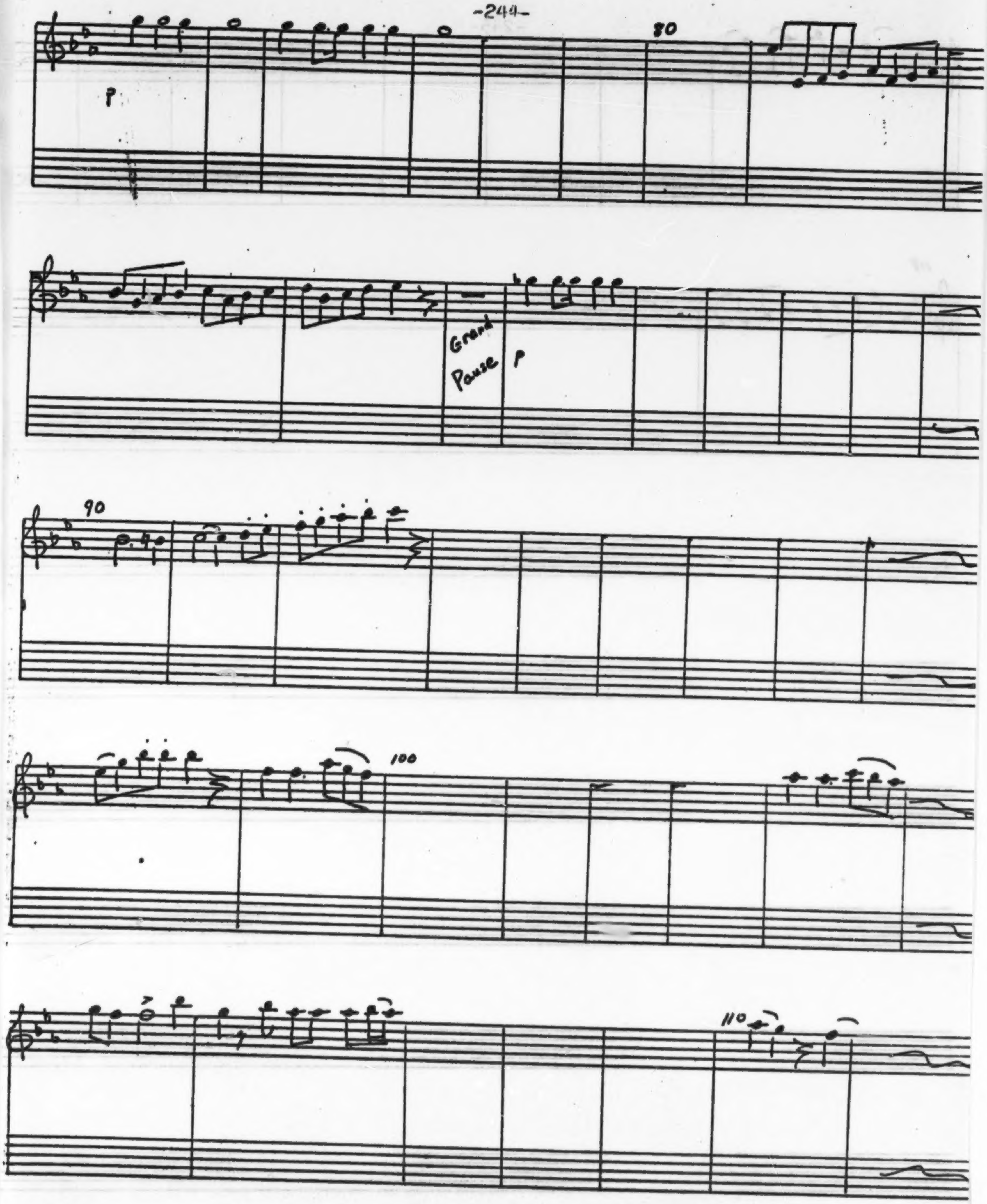
Blank Score Test


tr.
tr
f
p
10
p
p cresc
tr
20
30

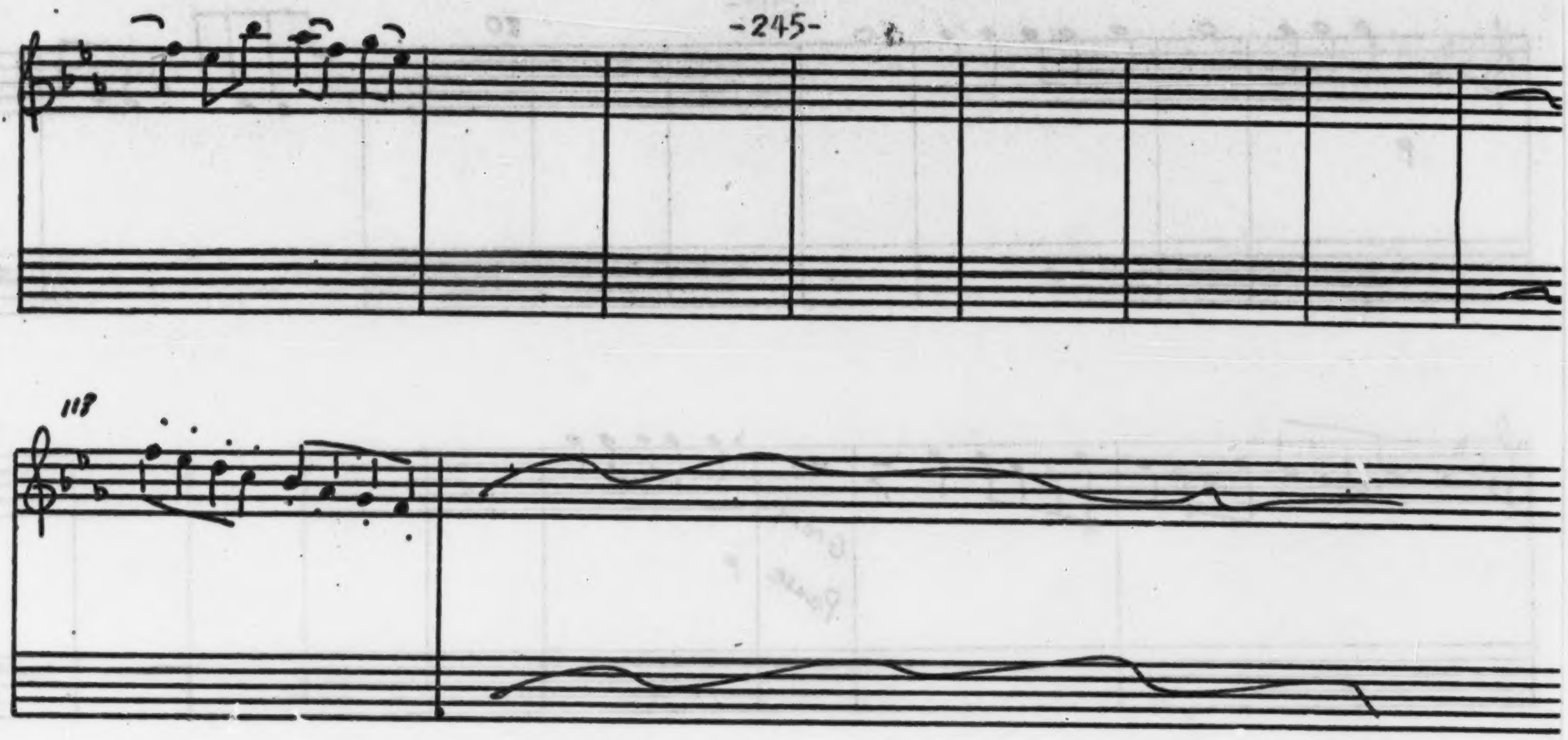
G.SCHIRMER


40
f
p
50
60
f
70

G.SCHIRMER


p
80
Grand Pause
p
90
100
110

G.SCHIRMER'S
ROYAL BRAND



G.SCHIRMER
ROYAL BRAND

changes. Another favorite item for guessing was instrumental timbre--the work was performed by a violin, oboe, clarinet and horn, but all orchestral instruments were freely suggested. No student indicated an awareness of the piece as chamber music, and out of the nearly one thousand tests only a single mention of the solo quality of certain sections was made.

To discover whether any order or hierarchy of listening existed, the students in situation 2 were given colored pencils with which to record their answers for different hearings of the music--one color for the first two hearings, a second color for hearings 3 and 4, and a third color for the final two hearings. Students were remarkably consistent in recording the same number of responses for each hearing. No pattern of listening emerged, however. Some students caught the important items on the first two hearings, while others did not write them down until the final two hearings.

The test was given to all classes at the end of the first and the second nine week periods. The differences in the activities and learnings just stressed appeared to have no effect on the test scores; no evidence was present such as special terminology or special emphasis in answering the test to suggest application of any of the recent learnings. Approximately ten percent of the tests were highly commendable, with cadences, phrases, melodies, contrasting parts, timbre, climaxes, etc., all correctly identified and marked; it is probable that these ten percent represent the students which music teachers usually teach to and upon whose response they evaluate their effectiveness. Unfortunately, no program in the public schools can justify itself on the basis of

high effectiveness for ten percent, and neither did the present study feel that this percentage indicated the year's objectives had been successfully reached.

Findings from the first phase of the study indicated that concensus exists concerning the listening act and those skills and knowledges necessary for it. Meyer's critics may disagree over the relative significance he attributes to certain elements of the music or of the listening act, but they agree that those elements must be included--that the same attitudes, knowledges and skills are part of the listening act.

The largest disagreement is not with Meyer's theory of expectation, but is between the point of view espousing intensive early training in musical listening, and the point of view espousing early "pleasant experiences" with music followed by intensive training at a more mature level.

The findings of this study can be interpreted as supporting either of these two viewpoints. On the one hand, the desirability of an early start in intensive musical learnings seems indisputable, for the field is so vast and complex and the necessity for repetition of experiences with the art so pressing, that to delay such education seems ill advised. Competence in the basic skills and knowledges is entirely feasible, as illustrated by the ten percent high achievers in this study, but whether this competence results from unlearned, natural, perception or from unusual aptitude for musical learning, is not known. On the other hand, the present study presents much evidence as to the infeasibility of teaching really musical skills and knowledges within the existing elementary music framework. The factor of time is the largest limitation. In the present study, with above-average allotments of time for music,

each of the four areas totalled a maximum of 12 to 14 hours of instruction, including time spent in measurement and evaluation. If genuine teaching and learning is desired in music, objectives must be sufficiently limited to be attainable in the time alloted.

Without the establishment of limited and feasible objectives, and serious attempts to teach for them, there is little that research can do to discover and promote new programs for public school music. In the first place, it is difficult to ascertain what might be done with particular materials or programs when the prerequisite knowledges are lacking, as in the present study. And secondly, a piece of research which does meet with success may be impractical for replication by teachers who are unaccustomed to focused work towards objectives. This study found that students retained no concrete knowledges or skills from their first four years of music instruction. Even though the knowledges and skills which the study needed as prerequisites are widely accepted objectives cited by teachers, found in song book series, in curriculum guides and methods texts, they are taught and learned in a fashion which offers no tangible results. No doubt this situation is a combination of time limitations, inappropriate or negative materials, and certain traditional or habitual approaches towards teaching music.

Many of the hoped-for skills and knowledges found to be lacking were learned by the students at some point, but these were never reinforced, built upon, required for further learnings, nor meaningfully enlarged, and so were promptly forgotten. At present, it is often the case that sixth grade music requires no more skill for successful participation than does first grade music. The use of both fifth and sixth grade students in the study gave indication that the same general results (with a few isolated exceptions) would have been obtained from either grade. The implication here may be that successful curriculum studies in music must reverse the trend of other subject matter areas and start from the bottom up, creating a foundation upon which to build, rather than making innovations at the top first.

The project forcefully points up the need for individualized attention in music. Evaluation is, of course, almost unheard of in music, and teachers are accustomed to estimating class progress subjectively rather than objectively. Teachers in the study were often dumb-founded at the low scores of their classes and their performance on specific items. A few bright and verbal students in a class can create the impression that learning is taking place; rote imitation, and the ability in singing to follow almost instantaneously, can mislead the teacher in judging reading and singing skills for the class. Students can participate, can enjoy making music, can become involved in a host of musical activities, without any individualized knowledge or skill, because music is an aural-oral group activity. The system breaks down when these knowledges and skills are applied to listening or individual performance. Teachers have long rationalized the failure of individual performance through lack of real necessity for music reading, to self-consciousness or fear on the part of the performer, and so on. Only recently has the interest in a listening program begun to evolve, and that principally at the junior and senior high school levels. The need for good evaluative tools for all kinds and levels of public school music is great, since without them no real knowledge of results is possible. Teacher reaction to the project is indicated by this short report of a teacher to her curriculum director.

Results of the study as they relate to the theory of expectation are these. (1) The study clarified the elements, knowledges and skills used in listening and implied by the theory of expectation. Sufficient disagreement exists among experts to warrant more thorough study at this point. (2) The study found that even a few of the knowledges and skills needed for musical listening with expectation were too difficult to be taught in one year with above average conditions and teachers, given the present structure of previous learnings and experiences. Without a feeling for phrases, tonality, "same" or "different" melodies and rhythms, it is doubtful that the average student in the elementary school can be taught to listen to music according to the theory of expectation. The above statement must be modified by an additional reference to the exceptions. Perhaps ten to twenty percent of the students were intellectually and musically equipped to develop musical expectations and have real listening experiences at a young age; these students are presumably the musically gifted and advantaged.

When music becomes sufficiently important to the school so that it is taught daily by teachers who have the capabilities desired in the students, and the music curriculum for all students attains the same importance as performance, real musical learnings can become possible for all students. The findings of this study indicate that the present objectives of music are out of reach under existing limitations of time and teacher preparation; the elements, skills and knowledges identified in the present study should by no means be added to that already unwieldy body of objectives. Rather, the findings of the study indicate that change should wait upon thorough and painstaking curriculum studies, begun in the elementary grades with elementary learnings to discover what is feasible. The music program must be cyclical in the sense that all learnings must be built upon, returned to and enlarged; it must develop in logical and psychological sequence from a firm foundation. To scrap all the present fictions, fancies and foibles of the music program will require the critical and unbiased findings of extended research.

May 25, 1965

I am tremendously pleased with the music project in which my middle intermediate classes have been involved this year. Although I don't know what results Dr. Colwell will find when he completes his analysis in all five participating school systems (part of this will be determined by results of testing which will be done the last week of school), I am convinced that what has gone on in my classes has been an extremely worthwhile experience for the children. (I think the classroom teachers would agree.)

I feel that we should continually strive for quality in our music program as in other areas of the curriculum, and this the project has certainly done. Too often our music classes (and I am guilty of this, too) only repeat the types of experiences the children get outside the classroom without broadening their outlook. (I refer specifically to the overabundance of the use of folksongs in most music programs, due probably in large measure to the types of music texts available in the past; while this is a part of our heritage, it is only one small part.) Even the use of recordings of composed music for listening doesn't of itself increase the children's understanding or ability to listen. This, I feel, is the greatest strength of this year's program--it helped the children know what to listen for and how to listen.

Because of time factors only music of the Classical Period (1750-1825--Haydn, Mozart, Beethoven) was used. However, the same type of approach could be applied to music of any period.

Four approaches were used--each involving about eight weeks of time:

1. Keyboard--The children learned to play simple tunes and chordal accompaniments by ear. Notation was introduced late in the quarter.

2. Aural--Songbooks were used this quarter. Emphasis was on hearing melodic line, phrases, chords, meter, rhythm, etc. and understanding the mechanics of notation.

3. Factual--an introduction to the Classical Period--the characteristics of the "Age of Reason," its art, its society, its scientists, etc. Life in Europe was compared to life in early America. Filmstrips and recordings on the lives of Mozart and Haydn were used. The characteristics of the music of this period and the types of compositions written at this time were studied. The instruments of the orchestra were also covered in this quarter.

4. Listening--This quarter was oriented toward helping the children develop additional listening skills. Areas covered included time, melody, style, form. The children were introduced to line scores and learned to use them as an aid to listening.

I do believe that too much material was covered in one year for our particular situation. However, this was one of the aims of the project--to discover what and how much children are really able to learn in music at this age level.

I used some of the approaches from the project (particularly in the aural and listening areas) in my Lower Intermediate classes and I am delighted with the results. The children have learned more than I thought possible. They entered 4th grade with little background in music, and they have come a long way in one year.

All in all I felt the project to be a most worthwhile undertaking, and I am happy that our classes were able to participate in it.

FINAL TEST

1. In this test you have a line score for a piece of music. Part of this piece will be played. You are to mark in the expression marks f (loud) and p (soft) in the bar where a change from loud to soft or soft to loud occurs. The first bar should be marked "f". Mark right on the music.

2. In this section of the music, (bars 1-8) what two instruments have the melody?

   ____

   ____

3. Listen to the first 16 bars. Mark on your music where a chord changes. The first chord is a I chord. Place an X under the chords that are not I chords.

4. Listen to the first 16 bars. The piece is in 3/4 meter. Draw a long, straight line like this at the end of the measure that ends each phrase.

5. Listen to the first 16 bars. The piece is in 3/4 meter. Draw a long, wiggly line like this at the end of the measure that ends the melody.

6. Listen to the section beginning with measure . Is this section in major or minor? or does it change major to minor or minor to major?

7. The section from 21-66 will be played. Draw a straight line like this at the end of each phrase in your music.

8. The section from 21-66 will be played. Draw a siggly line like this at the end of the first melody each time you hear it.

9. This piece was written in the Classical Period. List two things you heard in this piece that are characteristic of music of the classical Period.

   ____

   ____

10. You are to compare this piece with another piece of music and answer the following questions.

    Listen for the meter of the second piece. Is it the same meter as the first piece? __________

11. Listen to the melodies of the two numbers (more than the melody will be played so don't count the measures)

    Which melody was longer? First _____
    Second_____
    Both Same _____

FINAL TEST (page 2)

12. Listen for the tonality.

both are in major____

both are in minor____

One is in major, one in minor_____

13. Listen to the harmony of the two pieces.

the chords change more in the first piece_____

the chords change more in the second piece_____

both pieces change chords about the same_____

14. Listen to a longer section of each piece for the melody.

the melody returns in part or whole more often in the first piece _____

the melody returns in part or whole more often in the second piece ____

the melody comes back about the same number of times in both pieces _____

15. Listen for a countermelody.

first piece has a countermelody _____

second piece has a countermelody____

neither piece has a countermelody _____

16. Listen for contrast.

List one way the composer of the first piece obtains contrast

____

List one way the composer of the second piece obtains contrast

____

17. Listen for form.

How many different melodies did you hear in the first number? ___

Which melodies were repeated?__________

How many different melodies did you hear in the second number? ___

Which melodies were repeated? __________

FINAL TEST (page 3)

17. (cont.)

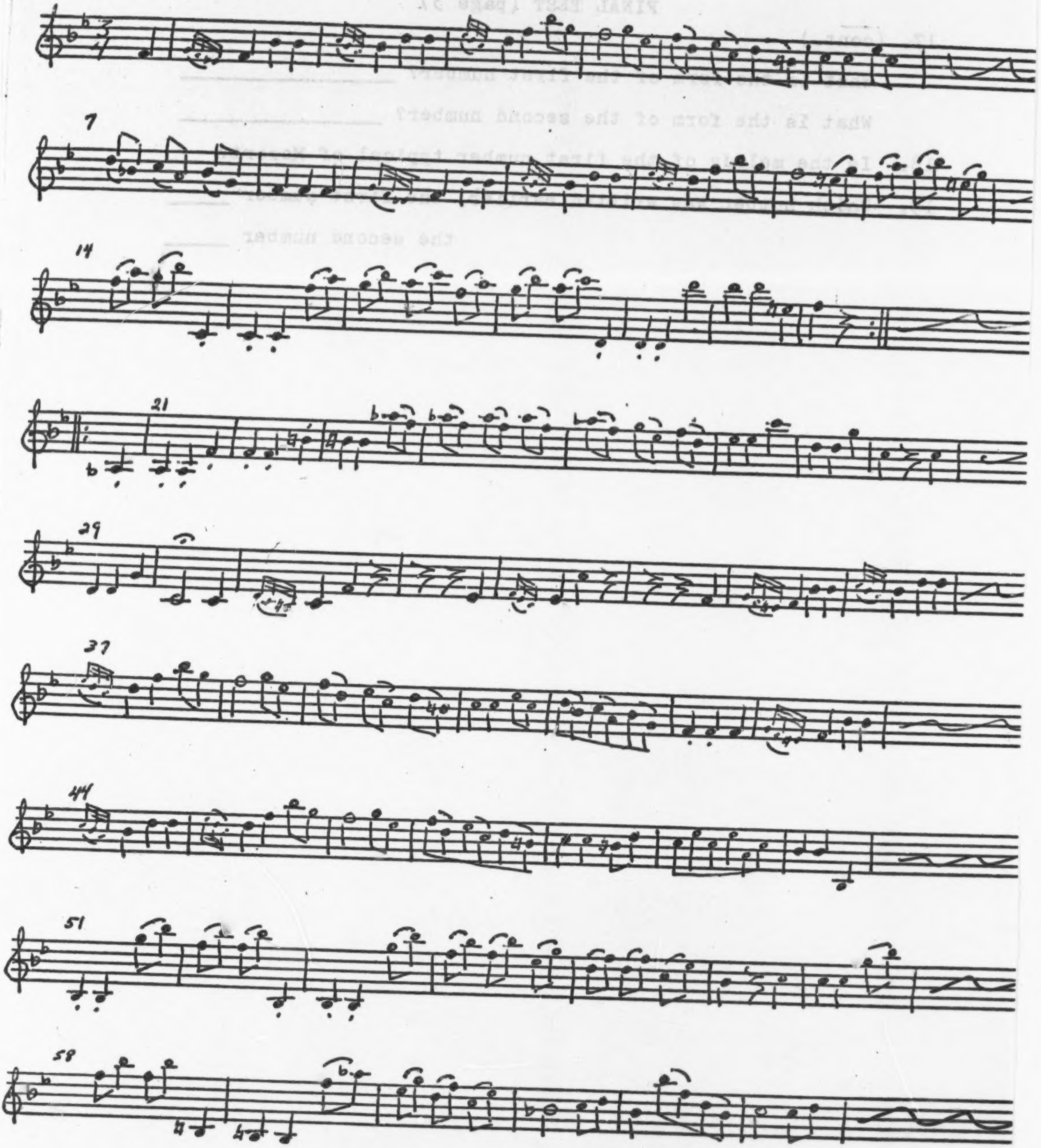
What is the form of the first number? ________________

What is the form of the second number? ________________

18. Is the melody of the first number typical of Mozart? ____

19. Which number was written earlier, the first number ____

the second number ____


Measures 67-106 were included on a second page

Appendix I

Table of t Values

School 1

IQ

kfla[1]	110.1[2]	t 4.68	kfla	110.1	t 6.59	kfla	110.1	t .529
lakf	128.9	(39)[3]	akfl	139.6	(37)	flak	112.7	(40)
lakf	128.9	t 3.34	lakf	128.9	t 4.36	akfl	139.6	t 6.59
akfl	139.6	(44)	flak	112.7	(47)	flak	112.7	(45)

ITBS

kfla	55.3	t 7.51	kfla	55.3	t 1.11	kfla	55.3	t 3.44
lakf	64.9	(48)	akfl	69.1	(49)	flak	68.9	(48)
lakf	64.9	t 3.53	lakf	64.9	t 1.05	akfl	69.1	t .061
akfl	69.1	(51)	flak	68.9	(50)	flak	68.9	(51)

SEASHORE MEASURES OF MUSICAL TALENTS

Pitch

kfla	58.7	t .11	kfla	58.7	t 2.31	kfla	58.7	t .42
lafk	59.6	(47)	akfl	75.5	(49)	flak	61.8	(48)
lakf	59.6	t 2.37	lafk	59.6	t .32	akfl	75.5	t 2.33
akfl	75.5	(50)	flak	61.8	(49)	flak	61.8	(51)

Loudness

kfla	35.9	t 2.56	kfla	35.9	t 4.04	kfla	35.9	t 1.63
lakf	53.8	(47)	akfl	62.5	(49)	flak	47.1	(48)
lakf	53.8	t 1.38	lakf	53.8	t 1.04	akfl	62.5	t 2.52
akfl	62.5	(50)	flak	47.1	(49)	flak	47.1	(51)

Rhythm

kfla	55.5	t 1.83	kfla	55.5	t 1.93	kfla	55.5	t .19
lakf	71.1	(47)	akfl	70.9	(49)	flak	57.3	(48)
lakf	71.1	t .037	lakf	71.1	1.57	akfl	70.9	t 1.65
akfl	70.9	(50)	flak	57.3	(49)	flak	57.3	(51)

[1] Represents order of experience, keyboard, factual, listening Aural

[2] Mean score

[3] (degrees of freedom)

Time

kfla lakf	45.1 60.2	t 2.01 (47)	kfla akfl	45.1 63.2	t 2.56 (49)	kfla flak	45.1 50.0	t .64 (47)
lakf akfl	60.2 63.2	t .46 (50)	lakf flak	60.2 50.0	t 1.43 (48)	akfl flak	63.2 50.0	t 1.97 (50)

Timbre

kfla lakf	57.8 68.8	t 1.32 (47)	kfla akfl	57.8 79.7	t 2.86 (49)	kfla flak	57.8 69.6	t 1.44 (47)
lakf akfl	68.8 79.7	t 1.64 (50)	lakf flak	68.8 69.6	t .11 (48)	akfl flak	79.7 69.6	t 1.56 (50)

Tonal Memory

kfla lakf	54.2 83.6	t 4.83 (47)	kfla akfl	54.2 78.0	t 3.94 (49)	kfla flak	54.2 60.6	t .84 (47)
lakf akfl	83.6 78.0	t 1.11 (50)	lakf flak	83.6 60.6	t 3.42 (48)	akfl flak	78.0 60.6	t 2.63 (50)

Drake Musical Memory Pretest

kfla lakf	64.1 74.2	t 1.72 (49)	kfla akfl	64.1 82.5	t 3.34 (50)	kfla flak	64.1 77.6	t 2.25 (49)
lakf akfl	74.2 82.5	t 1.91 (51)	lakf flak	74.2 77.6	t .69 (50)	akfl flak	82.5 77.6	t 1.09 (51)

Drake Musical Memory Posttest

kfla lakf	68.7 89.6	t 4.17 (46)	kfla akfl	68.7 91.3	t 4.80 (47)	kfla flak	68.7 95.5	t 6.30 (47)
lakf akfl	89.6 91.3	t .51 (49)	lakf flak	89.6 95.5	t 2.14 (49)	akfl flak	91.3 95.5	t 1.77 (50)

Colwell Pretest

kfla lakf	50.6 52.0	t .69 (46)	kfla akfl	50.6 54.1	t 1.36 (47)	kfla flak	50.6 59.5	t 3.88 (45)
lakf akfl	52.0 54.1	t .80 (45)	lakf flak	52.0 59.5	t 3.20 (43)	akfl flak	54.1 59.5	t 1.87 (44)

Colwell Posttest

kfla lakf	47.3 56.6	t 3.81 (46)	kfla akfl	47.3 60.7	t 4.89 (47)	kfla flak	47.3 62.7	t 5.76 (46)
lakf akfl	56.6 60.7	t 1.35 (49)	lakf flak	56.6 62.7	t 2.05 (48)	akfl flak	60.7 62.7	t .63 (49)

Keyboard I

lakf	79.6	t 3.65	lakf	79.6	t 1.79	akfl	89.2	t 1.35
akfl	89.2	(47)	flak	85.1	(48)	flak	85.1	(51)

Keyboard II

lakf	96.1	t .12	lakf	96.1	t 3.80	akfl	96.0	3.94
akfl	96.0	(48)	flak	81.2	(46)	flak	81.2	(48)

Keyboard III

lakf	60.7	t 1.52	lakf	60.7	t .028	akfl	67.7	t 1.41
akfl	67.7	(49)	flak	60.8	(48)	flak	60.8	(49)

Keyboard Final

kfla	51.7	t 4.36	kfla	51.7	t 4.10	kfla	51.7	t 5.91
lakf	70.6	(47)	akfl	70.8	(48)	flak	76.3	(49)
lakf	70.6	t .050	lakf	70.6	t 2.03	akfl	70.8	t 1.69
akfl	70.8	(49)	flak	76.3	(50)	flak	76.3	(51)

Aural I

kfla	29.6	t 10.4	lakf	76.0	t 3.38	kfla	29.6	t 6.38
lakf	76.0	(47)	flak	59.0	(45)	flak	59.0	(44)

Aural II

kfla	73.7	t 2.05	lakf	82.1	t 1.83	kfla	73.7	t .79
lakf	82.1	(46)	flak	76.7	(47)	flak	76.7	(47)

Aural III

kfla	49.7	t 1.98	lakf	60.3	t .36	kfla	49.7	t 2.40
lakf	60.3	(44)	flak	62.0	(48)	flak	62.0	(46)

Aural Final

lakf	69.0	t .033	lakf	69.0	t .90	akfl	68.9	t .86
akfl	68.9	(46)	flak	65.9	(47)	flak	65.9	(49)

Factual I

kfla	83.0	t .36	kfla	83.0	t .62	lakf	81.7	t .25
lakf	81.7	(48)	akfl	80.8	(48)	akfl	80.8	(48)

Factual II

kfla	83.4	t .38	kfla	83.4	t 1.24	lakf	84.7	t .83
lakf	84.7	(48)	akfl	87.4	(49)	akfl	87.4	(49)

Factual III

kfla	71.4	t 2.47	kfla	71.4	t 3.17	lakf	79.8	t .92
lakf	79.8	(47)	akfl	82.4	(48)	akfl	82.4	(49)

1-4

Factual Final

kfla	77.8	4.30	kfla	77.8	t 3.73	kfla	77.8	t .47
lakf	91.7	(46)	akfl	89.7	(48)	flak	79.6	(47)
lakf	91.7	t .91	lakf	91.7	t 3.74	akfl	89.7	t 3.15
akfl	89.7	(48)	flak	79.6	(47)	flak	79.6	(49)

Listening I

akfl	87.7	t .69	kfla	76.1	t 3.20	kfla	76.1	t 2.09
flak	85.2	(49)	akfl	87.7	(46)	flak	85.2	(45)

Listening II

akfl	82.2	t 1.29	kfla	57.4	t 6.96	kfla	57.4	t 4.75
flak	77.8	(49)	akfl	82.2	(46)	flak	77.8	(45)

Listening III

			kfla	51.7	t 1.49			
			akfl	57.7	(46)			

Listening Final

kfla	39.3	t 1.98	kfla	39.3	t 4.99	kfla	39.3	t 3.47
lakf	47.3	(47)	akfl	61.8	(48)	flak	54.6	(47)
lakf	47.3	t 3.13	lakf	47.3	t 1.60	akfl	61.8	t 1.47
akfl	61.8	(49)	flak	54.6	(48)	flak	54.6	(49)

Final Test

kfla	42.1	t 2.74	kfla	42.1	t 2.67	kfla	42.1	t 2.362
lakf	47.4	(46)	akfl	47.8	(46)	flak	47.6	(45)
lakf	47.4	t .22	lakf	47.4	t .10	akfl	47.8	t .086
akfl	47.8	(48)	flak	47.6	(47)	flak	47.6	(47)

Blank Score I

kfla	48.4	t 3.14	kfla	48.4	t 3.18	kfla	48.4	t 1.75
lakf	32.0	(44)	akfl	32.2	(46)	flak	38.0	(46)
lakf	32.0	t .082	lakf	32.0	t 1.39	akfl	32.2	t 1.36
akfl	32.0	(48)	flak	38.0	(48)	flak	38.0	(50)

Blank Score II

kfla	41.0	t .72	kfla	41.0	t .72	kfla	41.0	t .47
lakf	37.5	(42)	akfl	36.9	(45)	flak	38.8	(46)
lakf	37.5	t .12	lakf	37.5	t .39	akfl	36.9	t .42
akfl	36.9	(45)	flak	38.8	(46)	flak	38.8	(49)

Growth Scores

Drake		kfla	Colwell	
64.8	t .71		50.6	t 1.74
68.7	(46)		47.3	(46)

Growth Scores (cont.)

Drake			Colwell	
74.2	t 3.60	lakf	52.0	t 1.86
89.6	(49)		56.6	(46)
82.5	t 2.47	akfl	54.1	t 2.10
91.3	(51)		60.7	(48)
77.6	t 4.80	flak	59.5	t 1.08
95.5	(50)		62.7	(45)

School 2

IQ

akfl	117.3	t .87	akfl	117.3	t 2.16	akfl	117.3	t 1.82
kfla	114.0	(49)	flak	110.6	(47)	lakf	111.3	(46)
kfla	114.0	t .95	kfla	114.0	t .72	flak	110.6	t .25
flak	110.6	(44)	lakf	111.3	(43)	lakf	111.3	(41)

ITBS

akfl	56.0	t .91	akfl	56.0	t .53	akfl	56.0	t .28
kfla	53.0	(49)	flak	54.4	(46)	lakf	56.8	(45)
kfla	53.0	t .35	kfla	53.0	t .94	flak	54.4	t .63
flak	54.4	(45)	lakf	56.8	(44)	lakf	56.8	(41)

SEASHORE MEASURES OF MUSICAL TALENTS

Pitch

akfl	75.2	t 1.86	akfl	75.2	t 1.22	akfl	75.2	t 1.96
kfla	62.2	(51)	flak	65.4	(46)	lakf	61.4	(46)
kfla	62.2	t .36	kfla	62.2	t .091	flak	65.4	t .43
flak	65.4	(45)	lakf	61.4	(45)	lakf	61.4	(40)

Loudness

akfl	53.5	t 2.44	akfl	53.5	t 1.58	akfl	53.5	1.54
kfla	37.2	(51)	flak	41.5	(46)	lakf	43.2	(46)
kfla	37.2	t .60	kfla	37.2	t .99	flak	41.5	t .25
flak	41.5	(45)	lakf	43.2	(45)	lakf	43.2	(40)

Rhythm

akfl	78.9	t 1.63	akfl	78.9	t 1.46	akfl	78.9	t .51
kfla	67.4	(51)	flak	67.0	(46)	lakf	75.4	(46)
kfla	67.4	t .045	kfla	67.4	t .96	flak	67.0	t .88
flak	67.0	(45)	lakf	75.4	(45)	lakf	75.4	(46)

Time

akfl	70.4	t 2.23	akfl	70.4	t .90	akfl	70.4	t .50
kfla	54.6	(51)	flak	63.6	(46)	lakf	67.0	(46)
kfla	54.6	t 1.14	kfla	54.6	t 1.74	flak	63.6	t .45
flak	63.6	(45)	lakf	67.0	(45)	lakf	67.0	(40)

Timbre

akfl	70.7	t 3.87	akfl	70.7	t 1.66	akfl	70.7	t 2.45
kfla	41.5	(51)	flak	58.6	(46)	lakf	53.1	(46)
kfla	41.5	t 1.86	kfla	41.5	t 1.28	flak	58.6	t .61
flak	58.6	(45)	lakf	53.1	(45)	lakf	53.1	(40)

1-7

Tonal Memory

akfl	82.3	t 3.59	akfl	82.3	t 1.99	akfl	82.3	t 3.23
kfla	56.7	(51)	flak	67.9	(46)	lakf	55.9	(46)
kfla	56.7	t 1.19	kfla	56.7	t .082	flak	67.9	t 1.12
flak	67.9	(45)	lakf	55.9	(45)	lakf	55.9	(40)

Drake Musical Memory Pretest

akfl	89.2	t 3.21	akfl	89.2	t 4.59	akfl	89.2	t 4.68
kfla	72.5	(50)	flak	59.3	(46)	lakf	61.1	(45)
kfla	72.5	t 1.59	kfla	72.5	1.44	flak	59.3	t .19
flak	59.3	(44)	lakf	61.1	(43)	lakf	61.1	(39)

Drake Musical Memory Posttest

flak	76.4	t .36
lakf	79.4	(39)

Colwell Pretest

akfl	56.0	t .40	akfl	56.0	t 1.22	akfl	56.0	t 3.87
kfla	55.0	(48)	flak	53.3	(44)	lakf	49.2	(45)
kfla	55.0	t 2.31	kfla	55.0	t 2.31	flak	53.3	t 1.92
flak	53.3	(42)	lakf	49.2	(43)	lakf	49.2	(39)

Colwell Posttest

akfl	62.8	t 1.73	akfl	62.8	t 2.61	akfl	62.8	t 3.17
kfla	57.1	(51)	flak	54.8	(46)	lakf	54.0	(45)
kfla	57.1	t .60	kfla	57.1	t .85	flak	54.8	t .23
flak	54.8	(45)	lakf	54.0	(44)	lakf	54.0	(39)

Keyboard I

flak	80.1	t 1.15	akfl	85.0	t 1.51	akfl	85.0	t .0052
lakf	84.9	(35)	flak	80.1	(44)	lakf	84.9	(41)

Keyboard II

flak	64.5	t 2.92	akfl	83.5	t 3.70	akfl	83.5	t .50
lakf	80.5	(36)	flak	64.5	(44)	lakf	80.5	(40)

Keyboard III

			akfl	66.4	t 1.86			
			flak	59.2	(43)			

Keyboard Final

akfl	72.4	t 4.02	akfl	72.4	t 2.45	akfl	72.4	t 1.65
kfla	58.3	(47)	flak	63.1	(42)	lakf	66.3	(40)
kfla	58.3	t 1.25	kfla	58.3	t 2.11	flak	63.1	t .79
flak	63.1	(45)	lakf	66.3	(43)	lakf	66.3	(38)

Aural I

kfla	48.0	t 2.23	kfla	48.0	t 2.45	flak	61.9	t .22
flak	61.9	(42)	lakf	63.2	(42)	lakf	63.2	(38)

Aural II (not given)

Aural III

kfla	59.6	t .024
lakf	59.5	(43)

Aural Final

flak	47.0	t 3.71	akfl	75.0	t 7.19	akfl	75.0	t 3.59
lakf	62.4	(40)	flak	47.0	(46)	lakf	62.4	(46)

Factual I

akfl	69.4	t 1.33	kfla	63.5	t .98	akfl	69.4	t .15
kfla	63.5	(51)	lakf	69.8	(44)	lakf	69.8	(45)

Factual II

akfl	65.4	t .18	kfla	66.4	t .22	akfl	65.4	t .47
kfla	66.4	(50)	lakf	67.9	(45)	lakf	67.9	(45)

Factual III

akfl	72.9	t 1.73	kfla	66.1	t 1.43	akfl	72.9	t .15
kfla	66.1	(48)	lakf	72.3	(42)	lakf	72.3	(46)

Factual Final

akfl	79.0	t .56	akfl	79.0	t .12	akfl	79.0	t .49
kfla	77.0	(45)	flak	79.6	(40)	lakf	77.1	(39)
kfla	77.0	t .52	kfla	77.0	t .018	flak	79.6	t .45
flak	79.6	(45)	lakf	77.1	(44)	lakf	77.1	(39)

Listening I

akfl	83.0	t 8.13	akfl	83.0	t 5.09	kfla	63.2	t .51
kfla	63.2	(48)	flak	61.2	(45)	flak	61.2	(41)

Listening II

kfla	41.9	t 3.45
flak	61.5	(42)

Listening III (not given)

Listening Final

kfla	47.2	t .00072	kfla	47.2	t 1.10	flak	47.2	t 1.36
flak	47.2	(44)	lakf	53.6	(44)	lakf	53.6	(38)

Final Test

flak	44.3	t .51
lakf	45.4	(39)

Blank Score I

flak	31.6	t 1.77
lakf	38.9	(39)

Blank Score II

akfl	40.3	t 1.49	akfl	40.3	t 2.12	akfl	40.3	t 1.80
kfla	49.5	(39)	flak	51.6	(42)	lakf	49.2	(40)
kfla	49.5	t .27	kfla	49.5	t .0035	flak	51.6	t .31
flak	51.6	(37)	lakf	49.2	(35)	lakf	49.2	(38)

Growth Scores

Drake			Colwell	
		akfl	56.0	t 3.05
			62.8	(51)
		kfla	55.0	t .59
			57.1	(48)
59.3	t 1.85	flak	53.3	t .46
76.4	(40)		54.8	(39)
61.1	t 2.17	lakf	49.2	t 1.98
79.4	(38)		54.0	(39)

School 3

IQ

alkf	104.4	t .11	alkf	104.4	t .86	alkf	104.4	t .13
lfak	104.7	(41)	fkla	102.3	(44)	kafl	104.1	(39)
lfak	104.7	t .86	lfak	104.7	t .21	fkla	102.3	t .67
fkla	102.3	(43)	kafl	104.1	(38)	kafl	104.1	(41)

ITBS

alkf	52.0	t .18	alkf	52.0	t .77	alkf	52.0	t .14
lfak	51.3	(43)	fkla	55.1	(45)	kafl	51.5	(42)
lfak	51.3	t .96	lfak	51.3	t .048	fkla	55.1	t .95
fkla	55.1	(42)	kafl	51.5	(39)	kafl	51.5	(41)

SEASHORE MEASURES OF MUSICAL TALENTS

Pitch

alkf	51.4	t .55	alkf	51.4	t .55	alkf	51.4	t .37
lfak	56.0	(45)	fkla	47.2	(47)	kafl	54.3	(44)
lfak	56.0	t .97	lfak	56.0	t .18	fkla	47.2	t .82
fkla	47.2	(44)	kafl	54.3	(41)	kafl	54.3	(43)

Loudness

alkf	63.7	t .26	alkf	63.7	t 1.74	alkf	63.7	t 3.06
lfak	61.0	(45)	fkla	48.8	(47)	kafl	38.0	(44)
lfak	61.0	t 1.32	lfak	61.0	t 2.54	fkla	48.8	t 1.55
fkla	48.8	(44)	kafl	38.0	(41)	kafl	38.0	(43)

Rhythm

alkf	51.0	t 1.23	alkf	51.0	t 1.31	alkf	51.0	t .76
lfak	63.0	(45)	fkla	63.5	(47)	kafl	58.9	(44)
lfak	63.0	t .048	lfak	63.0	t .40	fkla	63.5	t .45
fkla	63.5	(44)	kafl	58.9	(41)	kafl	58.9	(43)

Time

alkf	37.9	t .91	alkf	37.9	t 3.23	alkf	37.9	t 1.69
lfak	43.8	(45)	fkla	57.6	(47)	kafl	47.7	(44)
lfak	43.8	t 1.87	lfak	43.8	t .55	fkla	57.6	t 1.45
fkla	57.6	(44)	kafl	47.7	(41)	kafl	47.7	(43)

Timbre

alkf	72.6	t 1.40	alkf	72.6	t 1.42	alkf	72.6	t .87
lfak	59.7	(45)	fkla	61.3	(47)	kafl	66.0	(44)
lfak	59.7	t .17	lfak	59.7	t .68	fkla	61.3	t .60
fkla	61.3	(44)	kafl	66.0	(41)	kafl	66.0	(43)

Tonal Memory

alkf	46.5	t .14	alkf	46.5	t .59	alkf	46.5	t .57
lfak	45.5	(45)	fkla	42.6	(47)	kafl	51.2	(44)
lfak	45.5	t .40	lfak	45.5	t .60	fkla	42.6	t .93
fkla	42.6	(44)	kafl	51.2	(41)	kafl	51.2	(43)

Drake Musical Memory Pretest

alfk	49.4	t 1.00	alkf	49.4	t .086	alkf	49.4	t 1.35
lfak	56.5	(45)	fkla	48.8	(47)	kafl	59.8	(44)
lfak	56.5	t 1.02	lfak	56.5	t .41	fkla	48.8	t 1.34
fkla	48.8	(44)	kafl	59.8	(41)	kafl	59.8	(43)

Drake Musical Memory Posttest

alkf	75.0	t .25	alkf	75.0	t .69	alkf	75.0	t .94
lfak	76.7	(43)	fkla	69.7	(45)	kafl	81.8	(41)
lfak	76.7	t .86	lfak	76.7	t .69	fkla	69.7	t 1.39
fkla	69.7	(42)	kafl	81.8	(38)	kafl	81.8	(40)

Colwell Pretest

						fkla	46.7	t 2.32
						kafl	51.2	(39)

Colwell Posttest

alkf	45.0	t .64	alkf	45.0	t .14	alkf	45.0	t 2.93
lfak	46.9	(42)	fkla	44.6	(45)	kafl	52.3	(41)
lfak	46.9	t .70	lfak	46.9	t 1.67	fkla	44.6	t 2.76
fkla	44.6	(41)	kafl	52.3	(37)	kafl	52.3	(40)

Keyboard I

alkf	64.4	t 1.68	alkf	64.4	t .95	lfak	71.0	t 1.09
lfak	71.0	(39)	fkla	66.9	(44)	fkla	66.9	(39)

Keyboard II

alkf	55.7	t .21	alkf	55.7	t10.6	lfak	54.4	t 6.66
lfak	54.4	(41)	fkla	88.9	(43)	fkla	88.9	(42)

Keyboard III

alkf	45.7	t 1.57	alkf	45.7	t .73	lfak	38.4	t .94
lfak	38.4	(42)	fkla	42.5	(44)	fkla	42.5	(40)

Keyboard Final

alkf	53.1	t 1.35	alkf	53.1	t .83	alkf	53.1	t .82
lfak	57.9	(41)	fkla	49.3	(45)	kafl	49.7	(39)
lfak	57.9	t 1.84	lfak	57.9	t 2.05	fkla	49.3	t .072
fkla	49.3	(40)	kafl	49.7	(35)	kafl	49.7	(39)

Aural I

lfak	36.0	t .62	lfak	36.0	t .44	fkla	38.7	t .21
fkla	38.7	(42)	kafl	37.8	(39)	kafl	37.8	(39)

Aural II

lfak	63.3	t .65	lfak	63.3	t .84	fkla	60.7	t 1.69
fkla	60.7	(40)	kafl	67.4	(38)	kafl	67.4	(38)

Aural III

lfak	40.5	t 1.59	lfak	40.5	t .82	fkla	33.7	t 2.03
fkla	33.7	(41)	kafl	44.7	(39)	kafl	44.7	(38)

Aural Final

alkf	41.0	t 2.94	alkf	41.0	t .66	alkf	41.0	t 3.57
lfak	52.4	(44)	fkla	43.2	(44)	kafl	56.6	(41)

lfak	52.4	t 2.55	lfak	52.4	t .89	fkla	43.2	t 3.25
fkla	43.2	(40)	kafl	56.6	(37)	kafl	56.6	(37)

Factual I

alkf	51.0	t .90	lfak	47.2	t 1.69	alkf	51.0	t .71
lfak	47.2	(44)	kafl	54.9	(38)	kafl	54.9	(40)

Factual II

alkf	83.5	t 2.87	lfak	66.0	t 1.62	alkf	83.5	t 1.80
lfak	66.0	(44)	kafl	77.1	(38)	kafl	77.1	(40)

Factual III

alkf	62.4	t 1.32	lfak	57.6	t .18	alkf	62.4	t 1.13
lfak	57.6	(41)	kafl	58.3	(35)	kafl	58.3	(40)

Factual Final

alkf	68.0	t 1.12	alkf	68.0	t 2.31	alkf	68.0	t .26
lfak	62.7	(41)	fkla	58.0	(45)	kafl	66.8	(40)

lfak	62.7	t 1.33	lfak	62.7	t 1.08	fkla	58.0	t 2.51
fkla	58.0	(40)	kafl	66.8	(35)	kafl	66.8	(39)

Listening I

fkla	54.4	t 4.41	alkf	52.2	t .39	alkf	52.2	t 3.84
kafl	74.1	(37)	fkla	54.4	(45)	kafl	74.1	(40)

Listening II

fkla	54.7	t 3.97	alkf	35.0	t 4.25	alkf	35.0	t10.2
kafl	72.2	(41)	fkla	54.7	(43)	kafl	72.2	(41)

Listening III

kfla	38.6	t 2.87
kafl	49.5	(39)

Listening Final

alkf	36.3	t .79	alkf	36.3	t .97	alkf	36.3	t 2.23
lfak	40.4	(39)	fkla	41.0	(42)	kafl	45.7	(40)
lfak	40.4	t .080	lfak	40.4	t .88	fkla	41.0	t .87
fkla	41.0	(37)	kafl	45.7	(35)	kafl	45.7	(38)

Final Test

alkf	37.8	t 3.16	alkf	37.8	t 1.18	alkf	37.8	t 1.25
lfak	32.2	(42)	fkla	40.3	(45)	kafl	40.2	(41)
lfak	32.2	t 3.63	lfak	32.2	t 4.04	fkla	40.3	t .043
fkla	40.3	(41)	kafl	40.2	(37)	kafl	40.2	(40)

Blank Score II

alkf	31.8	t 1.61	alkf	31.8	t 5.97	alkf	31.8	t 1.14
lfak	24.5	(43)	fkla	59.5	(41)	kafl	25.4	(38)
lfak	24.5	t 5.77	lfak	24.5	t .20	fkla	59.5	t 4.53
fkla	59.5	(38)	kafl	25.4	(35)	kafl	25.4	(33)

Growth Scores

Drake			Colwell	
49.4	t 3.93	alkf		
75.0	(47)			
56.5	t 2.81	lfak		
76.7	(41)			
48.8	t 2.55	fkla	46.7	t .89
69.7			44.6	
59.8	t 2.54	kafl	51.2	t .47
81.8			52.3	

School 4

IQ

kfla	120.4	t 2.11	kfla	120.4	t 3.15	kfla	120.4	t 2.41
flak	111.9	(49)	akfl	110.5	(50)	lakf	110.6	(49)
flak	111.9	t .41	flak	111.9	t .31	akfl	110.5	t .029
akfl	110.5	(53)	lakf	110.6	(52)	lakf	110.6	(53)

ITBS

kfla	64.0	t .47	kfla	64.0	t .23	kfla	64.0	t .32
flak	62.3	(51)	akfl	64.8	(52)	lakf	63.0	(51)
flak	62.3	t .66	flak	62.3	t .18	akfl	64.8	t .54
akfl	64.8	(53)	lakf	63.0	(52)	lakf	63.0	(53

SEASHORE MEASURES OF MUSICAL TALENTS

Pitch

kfla	65.5	t 1.33	kfla	65.5	t .51	kfla	65.5	t 1.45
flak	55.7	(50)	akfl	61.8	(50)	lakf	55.0	(50)
flak	55.7	t .79	flak	55.7	t .092	akfl	61.8	t .89
akfl	61.8	(50)	lakf	55.0	(50)	lakf	55.0	(50)

Loudness

kfla	39.1	t 1.70	kfla	39.1	t .29	kfla	39.1	t .13
flak	51.0	(50)	akfl	41.2	(50)	lakf	39.9	(50)
flak	51.0	t 1.23	flak	51.0	t 1.57	akfl	41.2	t .18
akfl	41.2	(50)	lakf	39.9	(50)	lakf	39.9	(50)

Rhythm

kfla	73.4	t .90	kfla	73.4	t .38	kfla	73.4	t 1.76
flak	66.8	(50)	akfl	70.5	(50)	lakf	60.4	(50)
flak	66.8	t .48	flak	66.8	t .85	akfl	70.5	t 1.30
akfl	70.5	(50)	lakf	60.4	(50)	lakf	60.4	(50)

Time

kfla	48.9	t 1.14	kfla	48.9	t .59	kfla	48.9	t .64
flak	40.1	(51)	akfl	53.8	(50)	lakf	44.0	(51)
flak	40.1	t 1.54	flak	40.1	t .46	akfl	53.8	t 1.11
akfl	53.8	(51)	lakf	44.0	(52)	lakf	44.0	(51)

Timbre

kfla	64.6	t .26	kfla	64.6	t .82	kfla	64.6	t .58
flak	62.6	(51)	akfl	53.8	(50)	lakf	60.3	(51)
flak	62.6	t .53	flak	62.6	t .29	akfl	53.8	t .27
akfl	53.8	(51)	lakf	60.3	(52)	lakf	60.3	(51)

Tonal Memory

kfla	67.1	t .91	kfla	67.1	t 1.21	kfla	67.1	t 1.07
flak	60.6	(51)	akfl	58.8	(50)	lakf	59.2	(51)
flak	60.6	t .25	flak	60.6	t .18	akfl	58.8	t .054
akfl	58.8	(51)	lakf	59.2	(52)	lakf	59.2	(51)

Drake Musical Memory Pretest

kfla	74.3	t 1.19	kfla	74.3	t .018	kfla	74.3	t .076
flak	67.1	(50)	akfl	74.4	(48)	lakf	74.7	(50)
flak	67.1	t 1.13	flak	67.1	t 1.15	akfl	74.4	t .056
akfl	74.4	(48)	lakf	74.7	(50)	lakf	74.7	(48)

Drake Musical Memory Posttest

kfla	93.1	t .59	kfla	93.1	t 1.10	kfla	93.1	t 1.40
flak	91.2	(50)	akfl	88.9	(47)	lakf	88.2	(48)
flak	91.2	t .60	flak	91.2	t .85	akfl	88.9	t .16
akfl	88.9	(49)	lakf	88.2	(50)	lakf	88.2	(47)

Colwell Pretest

kfla	58.9	t 1.98	kfla	58.9	t .67	kfla	58.9	t 1.73
flak	54.0	(50)	akfl	57.0	(50)	lakf	54.1	(51)
flak	54.0	t 1.31	flak	54.0	t .064	akfl	57.0	t 1.11
akfl	57.0	(50)	lakf	54.1	(51)	lakf	54.1	(51)

Colwell Posttest

kfla	59.5	t 1.11	kfla	59.5	t .32	kfla	59.5	t .99
flak	55.8	(48)	akfl	58.3	(46)	lakf	55.8	(45)
flak	55.8	t 1.32	flak	55.8	t .0060	akfl	58.3	t .67
akfl	58.3	(48)	lakf	55.8	(47)	lakf	55.8	(45)

Keyboard I

flak	82.3	t 1.49	flak	82.3	t 1.45	akfl	87.8	t 3.02
akfl	87.8	(50)	lakf	75.9	(48)	lakf	75.9	(48)

Keyboard II

flak	82.3	t .53	flak	82.3	t .89	akfl	84.7	t .32
akfl	84.7	(47)	lakf	86.2	(49)	lakf	86.2	(44)

Keyboard III

flak	56.2	t 1.75	flak	56.2	t .62	akfl	63.7	t .97
akfl	63.7	(48)	lakf	59.0	(46)	lakf	59.0	(48)

1-16

Keyboard Final

kfla	58.9	t 2.27	kfla	58.9	t 2.24	kgla	58.9	t 2.90
flak	68.7	(50)	akfl	69.2	(50)	lakf	71.4	(49)
flak	68.7	t .16	flak	68.7	t .87	akfl	69.2	t .60
akfl	69.2	(50)	lakf	71.4	(49)	lakf	71.4	(49)

Aural I

kfla	49.1	t .84	flak	54.7	t .059	kfla	49.1	t 1.00
flak	54.7	(46)	lakf	55.1	(45)	lakf	55.1	(47)

Aural II

kfla	76.0	t .057	flak	76.2	t .21	kfla	76.0	t .21
flak	76.2	(49)	lakf	76.8	(49)	lakf	76.8	(50)

Aural III

kfla	62.9	t 1.36	flak	56.8	t 1.59	kfla	62.9	t .31
flak	56.8	(47)	lakf	64.5	(50)	lakf	64.5	(47)

Aural Final

kfla	64.1	t .16	kfla	64.1	t .95	kfla	64.1	t 2.66
flak	63.5	(48)	akfl	60.7	(49)	lakf	53.4	(47)
flak	63.5	t .88	flak	63.5	t 2.79	akfl	60.7	t 2.33
akfl	60.7	(51)	lakf	53.4	(49)	lakf	53.4	(50)

Factual I

akfl	56.9	t 1.19	kfla	77.5	t 4.87	kfla	77.5	t 6.07
lakf	51.0	(46)	akfl	56.9	(47)	lakf	51.0	(45)

Factual II

akfl	73.4	t 3.59	kfla	77.0	t .77	kfla	77.0	t 3.27
lakf	58.8	(50)	akfl	73.4	(49)	lakf	58.8	(50)

Factual III

akfl	69.5	t .28	kfla	67.9	t .37	kfla	67.9	t .71
lakf	70.8	(48)	akfl	69.5	(45)	lakf	70.8	(43)

Factual Final

kfla	79.0	t .35	kfla	79.0	t .94	kfla	79.0	t 2.45
flak	80.6	(49)	akfl	74.4	(48)	lakf	65.8	(45)
flak	80.6	t 1.94	flak	80.6	t 4.15	akfl	74.4	t 2.08
akfl	74.4	(51)	lakf	65.8	(48)	lakf	65.8	(47)

Listening I

kfla	82.6	t .77	kfla	82.6	t 1.13	flak	85.1	t 1.68
flak	85.1	(46)	akfl	77.6	(46)	akfl	77.6	(48)

Listening II

kfla	74.3	t .15	kfla	74.3	t 1.38	flak	74.8	t 1.63
flak	74.8	(49)	akfl	68.8	(48)	akfl	68.8	(51)

Listening III

			kfla	57.3	t 1.53			
			akfl	53.4	(49)			

Listening Final

kfla	54.2	t 1.89	kfla	54.2	t 1.20	kfla	54.2	t .12
flak	46.6	(45)	akfl	48.9	(46)	lakf	53.7	(44)
flak	46.6	t .55	flak	46.6	t 1.66	akfl	48.9	t 1.04
akfl	48.9	(49)	lakf	53.7	(47)	lakf	53.7	(48)

Final Test

kfla	42.9	t 1.50	kfla	42.9	t .38	kfla	42.9	t .30
flak	46.2	(49)	akfl	43.8	(50)	lakf	43.6	(48)
lfak	46.2	t 1.32	flak	46.2	t 1.41	akfl	43.8	t .089
akfl	43.8	(51)	lakf	43.6	(49)	lakf	43.6	(50)

Blank Score I

kfla	43.9	t 1.48	kfla	43.9	t 1.19	kfla	43.9	t 1.66
flak	36.6	(48)	akfl	49.0	(49)	lakf	36.3	(49)
lakf	36.6	t 2.55	lakf	36.6	t .069	akfl	49.0	t 2.81
akfl	49.0	(51)	lakf	36.3	(51)	lakf	36.3	(52)

Blank Score II

kfla	49.5	t 1.38	kfla	49.5	t 2.36	kfla	49.5	t 1.24
flak	42.1	(44)	akfl	63.5	(42)	lakf	41.9	(42)
flak	42.1	t 4.03	flak	42.1	t .039	akfl	63.5	t 3.53
akfl	63.5	(44)	lakf	41.9	(44)	lakf	41.9	(42)

Growth Scores

Drake			Colwell	
		kfla		
74.3	t 4.27		58.9	t .18
93.1	(49)		59.5	(48)
		flak		
67.1	t 4.64		54.0	t .76
91.2	(51)		55.8	(50)

Growth Scores (cont.)

	Drake		Colwell	
akfl	74.4 88.9	t 2.70 (46)	57.0 58.3	t .40 (48)
lakf	74.7 88.2	t 2.45 (45)	54.1 55.8	t .54 (48)

CONTROL

School 1

Final Tests

Listening

1*	48.3	t 2.40	1	48.3	t .26	1	48.3	t 3.12
kfla	39.3	(50)	lakf	47.3	(51)	akfl	61.8	(52)
kfla	39.3	t 1.98	kfla	39.3	t 4.99	lakf	47.3	t 3.13
lakf	47.3	(47)	akfl	61.8	(48)	akfl	61.8	(49)

Keyboard

1	58.3	t 1.50	1	58.3	t 3.86	1	58.3	t 3.46
kfla	51.7	(49)	lakf	70.6	(50)	akfl	70.8	(51)
kfla	51.7	t 4.36	kfla	51.7	t 4.10	lakf	70.6	t .049
lakf	70.6	(47)	akfl	70.8	(48)	akfl	70.8	(49)

Aural

lakf	69.0	t .033	1	42.3	t 7.35	1	42.3	t 7.28
akfl	68.9	(46)	lakf	69.0	(48)	akfl	68.9	(50)

Factual

1	48.8	t 7.76	1	48.8	t 7.35	1	48.8	t14.1
kfla	77.8	(50)	lakf	91.7	(50)	akfl	89.7	(52)
kfla	77.8	t 4.30	kfla	77.8	t 3.73	lakf	91.7	t .91
lakf	91.7	(46)	akfl	89.7	(48)	akfl	89.7	(48)

*control group, did not participate in experimental materials

1-20

CONTROL

School 2

Listening

1	29.4	t 4.41	1	29.4	t 5.26	flak	47.2	t 1.36
flak	47.2	(47)	lakf	53.6	(47)	lakf	53.6	(38)

Keyboard

1	42.1	t 4.07	1	42.1	t 4.61	flak	63.1	t .79
flak	63.1	(48)	lakf	66.3	(46)	lakf	66.3	(38)

Aural

1	30.2	t 4.68	1	30.2	t10.3	flak	46.9	t 3.71
flak	46.9	(48)	lakf	62.4	(48)	lakf	62.4	(40)

Factual

1	40.4	t 9.17	1	40.4	t 9.35	flak	79.6	t .45
flak	79.6	(48)	lakf	77.1	(47)	lakf	77.1	(39)

CONTROL

School 3

Listening

1	35.3	t 2.35	1	35.3	t 1.13	1	35.3	t .94
kafl	45.7	(37)	fkla	41.0	(39)	lfak	40.4	(36)
1	35.3	5 .29	kafl	45.7	t .87	kafl	45.7	t .88
alkf	36.3	(4)	fkla	41.0	(38)	lfak	40.4	(35)
kafl	45.7	t 2.23	fkla	41.0	t .080	fkla	41.0	t .97
alkf	36.3	(40)	lfak	40.4	(37)	alkf	36.3	(42)
lfak	40.4	t .79						
alkf	36.3	(39)						

Aural

1	43.4	t 2.78	1	43.4	t .045	1	43.4	t 2.15
kafl	56.5	(36)	fkla	43.2	(39)	lfak	52.4	(39)
1	43.4	t .61	kafl	56.5	t 3.25	kfal	56.5	t .89
alkf	41.0	(43)	fkla	43.2	(37)	lfak	52.4	(37)
kafl	56.5	t 3.57	fkla	43.2	t 2.55	fkla	43.2	t .66
alkf	41.0	(41)	lfak	52.4	(40)	alkf	41.0	(44)
lfak	52.4	t 2.94						
alkf	41.0	(44)						

Keyboard

1	54.0	t 1.05	1	54.0	t 1.00	1	54.0	t 1.17
kafl	49.7	(36)	fkla	49.3	(41)	lfak	57.9	(37)
1	54.0	t .24	kfal	49.7	t .072	kfal	49.7	t 2.05
alkf	53.1	(42)	fkla	49.3	(39)	lfak	57.9	(35)
kafl	49.7	t .82	fkla	49.3	t 1.84	fkla	49.3	t .83
alkf	53.1	(40)	lfak	57.9	(40)	alkf	53.1	(45)
lfak	57.9	t 1.35						
alkf	53.1	(41)						

Factual

1	51.9	t 3.56	1	51.9	t 1.55	1	51.9	t 2.56
kafl	66.8	(35)	fkla	58.0	(40)	lfak	62.7	(36)
1	51.9	t 3.24	kafl	66.8	t 2.51	kafl	66.8	t 1.08
alkf	68.0	(41)	fkla	58.0	(39)	lfak	62.7	(35)
kafl	66.8	t .26	fkla	58.0	t 1.33	fkla	58.0	t 2.31
alkf	68.0	(40)	lfak	62.7	(40)	alkf	68.0	(45)
lfak	62.7	t 1.12						
alkf	68.0	(41)						

CONTROL

School 4

Listening

lakf	53.7	t .12	lakf	53.7	t 1.66	lakf	53.7	t 1.04
kfla	54.2	(44)	flak	46.6	(47)	akfl	48.9	(48)
lakf	53.7	t .19	lakf	53.7	t 1.18	kfla	54.2	t 1.89
flak(u)	54.5	(47)	l	48.7	(44)	flak	46.6	(45)
kfla	54,2	t 1.20	kfla	54.2	t .083	kfla	54.2	t 1.43
akfl	48.9	(46)	flak(u)	54.6	(45)	l	48.7	(42)
flak	46.6	t .55	flak	46.6	t 1.80	flak	46.6	t .57
akfl	48.9	(49)	flak(u)	54.6	(48)	l	48.7	(45)
akfl	48.9	t 1.20	akfl	48.9	t .047	flak(u)	48.9	t 1.34
flak(u)	54.6	(49)	l	48.7	(46)	l	48.7	(45)

Keyboard

lakf	71.4	t 2.90	lakf	71.4	t .87	lakf	71.4	t .60
kfla	58.8	(49)	flak	68.7	(49)	akfl	69.2	(49)
lakf	71.4	t 1.69	lakf	71.4	t 4.05	kfla	58.8	t 2.27
flak(u)	76.3	(50)	l	55.9	(51)	flak	68.7	(50)
kfla	58.8	t 2.24	kfla	58.8	t 4.26	kfla	58.8	t .62
akfl	69.2	(50)	flak(u)	76.3	(51)	l	55.9	(52)
flak	68.7	t .16	flak	68.7	t 2.60	flak	68.7	t 3.33
akfl	69.2	(50)	flak(u)	76.3	(51)	l	55.9	(52)
akfl	69.2	t 2.10	akfl	69.2	t 3.21	flak(u)	76,3	t 5.67
flak(u)	76.3	(51)	l	55.9	(52)	l	55.9	(53)

Aural

lakf	53.4	t 2.66	lakf	53.4	t 2.79	lakf	53.4	t 2.33
kfla	64.1	(47)	flak	63.5	(49)	akfl	6017	(50)
lakf	53.4	t 3.49	lakf	53.4	t 1.00	kfla	64.1	t .16
flak(u)	65.8	(49)	l	50.0	(49)	flak	63.5	(48)
kfla	64.1	t .95	kfla	64.1	t .45	kfla	64.1	t 3.72
akfl	60.7	(49)	flak(u)	65.8	(48)	l	50.0	(48)
flak	63.5	t .88	flak	63.5	t .68	flak	63.5	t 3.98
akfl	60.7	(51)	flak(u)	65.8	(48)	l	50.0	(48)
akfl	60.7	t 1.67	akfl	60.7	t 3.68	flak(u)	65.8	t 4.75
flak(u)	65.8	(51)	l	50.0	(51)	l	50.0	(50)

Factual

lakf	65.8	t 2.45	lakf	65.8	t 4.15	lakf	65.8	t 2.08
kfla	79.0	(45)	flak	80.6	(48)	akfl	74.4	(47)
lakf	65.8	t 3.25	lakf	65.8	t 4.21	kfla	79.0	t .35
flak(u)	79.6	(46)	l	49.9	(49)	flak	80.6	(49)
kfla	79.0	t .94	kfla	79.0	t .12	kfla	79.0	t 6.32
akfl	74.4	(48)	flak(u)	79.6	(47)	l	49.9	(50)
flak	80.6	t 1.94	flak	80.6	t .29	flak	80.6	t10.7
akfl	74.4	(51)	flak(u)	79.6	(50)	l	49.9	(53)
akfl	74.4	t 1.36	akfl	74.4	t 7.18	flak(u)	79.6	t 8.45
flak(u)	79.6	(49)	l	49.9	(52)	l	49.9	(51)

Appendix II

Table of t Values

Lyke Schools

IQ

School	Mean		School	Mean		School	Mean	
G	104.3	t .55	G	104.3	t.48	G	104.5	t 1.35
C	106.2	(37)[1]	R	102.3	(37)	W	99.0	(45)
C	106.2	t 1.31	C	106.2	t 2.49	R	102.3	t 1.00
R	102.3	(44)	W	99.0	(52)	W	99.0	(52)

ITBS

G	50.3	t .93	G	50.3	t .47	G	50.3	t .19
C	54.2	(40)	R	52.6	(37)	W	49.5	(45)
C	54.2	t .42	C	54.2	t 1.50	R	52.6	t .85
R	52.6	(47)	W	49.5	(55)	W	49.5	(52)

SEASHORE MEASURES OF MUSICAL TALENTS

Pitch

G	62.4	t .17	G	62.4	t 1.72	G	62.4	t .93
C	61.0	(42)	R	46.6	(39)	W	55.3	(48)
C	61.0	t 1.66	C	61.0	t .78	R	46.6	t 1.10
R	46.6	(47)	W	55.3	(56)	W	55.3	(53)

Loudness

G	48.1	t .0095	C	48.1	t .92	G	48.1	t .76
C	48.0	(42)	R	41.0	(39)	W	42.8	(48)
C	48.0	t 1.07	C	48.0	t .88	R	41.0	t .30
R	41.0	(47)	W	42.8	(56)	W	42.8	(53)

Rhythm

G	71.2	t .57	G	71.2	t .20	G	71.2	t .48
C	75.7	(42)	R	73.0	(39)	W	67.5	(48)
C	75.7	t .40	C	75.7	t 1.35	R	73.0	t .81
R	73.0	(47)	W	67.5	(56)	W	67.5	(53)

Time

G	66.9	t 2.33	G	66.9	t 2.07	G	66.9	t 2.52
C	50.4	(42)	R	49.5	(39)	W	48.8	(53)

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[1] degrees of freedom

Time (Cont.)

C	50.4	t .12	C	50.4	t .27	R	49.5	t .11
R	49.5	(47)	W	48.8	(56)	W	48.8	(53)

Timbre

G	66.4	t .87	G	66.4	t 1.32	G	66.4	t 1.41
C	72.3	(42)	R	56.1	(39)	W	55.7	(48)
C	72.3	t 2.30	C	72.3	t 2.47	R	56.1	t .063
R	56.1	(47)	W	55.7	(56)	W	55.7	(53)

Tonal Memory

G	69.5	t 1.71	G	69.5	t 3.12	G	69.5	t .52
C	56.2	(41)	R	44.7	(39)	W	65.0	(48)
C	56.2	t 1.53	C	56.2	t 1.11	R	44.7	t 2.49
R	44.7	(46)	W	65.0	(55)	W	65.0	(53)

Drake Musical Memory Pretest

G	69.5	t .67	G	69.5	t 1.75	G	69.5	t 2.01
C	64.5	(40)	R	82.4	(37)	W	82.8	(43)
C	64.5	t 2.79	C	64.5	t 3.19	R	82.4	t .069
R	82.4	(45)	W	82.8	(51)	W	82.8	(48)

Drake Musical Memory Posttest

G	79.1	t 2.05	G	79.1	t .82	G	79.1	t 1.02
C	89.0	(37)	R	73.1	(36)	W	71.2	(41)
C	89.0	t 2.89	C	89.0	t 2.90	R	73.1	t .26
R	73.1	(41)	W	71.2	(46)	W	71.2	(45)

Colwell Pretest

G	59.1	t 2.53	G	59.1	t 1.60	G	59.1	t 2.50
C	50.0	(39)	R	64.7	(39)	W	50.1	(46)
C	50.0	t 4.67	C	50.0	t .0072	R	64.7	t 4.62
R	64.7	(44)	W	50.1	(51)	W	50.1	(51)

Colwell Posttest

G	46.7	t .99	G	46.7	t .47	G	46.7	t .47
C	49.9	(41)	R	45.2	(38)	W	48.1	(46)
C	49.9	t 2.14	C	49.9	T .83	R	45.2	t 1.41
R	45.2	(45)	W	48.1	(53)	W	48.1	(50)

Keyboard Pretest

G	46.2	t .29	G	46.2	t .77	G	46.2	t .82
C	47.2	(41)	R	43.6	(36)	W	43.2	(45)
C	47.2	t 1.17	C	47.2	t 1.22	R	43.6	t .13
R	43.6	(43)	W	43.2	(52)	W	43.2	(47)

Keyboard Posttest

G	68.7	t .94	G	68.7	t 1.75	G	68.7	t 5.07
C	72.2	(36)	R	63.1	(38)	W	51.4	(44)
C	72.2	t 2.82	C	72.2	t 6.23	R	63.1	T 3.97
R	63.1	(42)	W	51.4	(48)	W	51.4	(50)

Farnum Music Notation Pretest

G	70.1	t .47	G	70.1	t 1.20	G	70.1	t .79
C	66.2	(40)	R	59.0	(37)	W	64.3	(44)
C	66.2	t .81	C	66.2	t .27	R	59.0	t .66
R	59.0	(43)	W	64.3	(50)	W	64.3	(47)

Farnum Music Notation Posttest

G	74.5	t .42	G	74.5	t 2.89	G	74.5	t 1.84
C	71.4	(37)	R	50.4	(36)	W	59.4	(44)
C	71.4	t 2.77	C	71.4	t 1.64	R	50.4	t 1.14
R	50.4	(43)	W	59.4	(51)	W	59.4	(50)

Keyboard I

G	65.1	t 3.84	G	65.1	t .14	G	65.1	t 1.22
C	82.2	(39)	R	65.8	(38)	W	59.4	(40)
C	82.2	t 3.67	C	82.2	t 6.19	R	65.8	t 1.40
R	65.8	(45)	W	59.4	(47)	W	59.4	(46)

Keyboard II

G	42.8	t19.6	G	42.8	t 3.70	G	42.8	t11.7
C	95.2	(38)	R	66.2	(37)	W	85.5	(37)
C	95.2	t 6.11	C	95.2	t 4.36	R	66.2	t 3.67
R	66.2	(45)	W	85.5	(45)	W	85.5	(44)

Keyboard III

G	53.1	t 7.12	G	53.1	t 1.69	G	53.1	t 1.37
C	82.5	(37)	R	44.4	(33)	W	45.3	(43)
C	82.5	t11.4	C	82.5	t 9.07	R	44.4	t .18
R	44.4	(42)	W	45.3	(52)	W	45.3	(48)

Keyboard IV

G	54.6	t 4.56
C	68.3	(40)

Keyboard Final

G	52.5	t 1.85
W	43.2	(42)

Keyboard Quiz

G	76.6	t .24	G	76.6	t 1.31	G	76.6	t 2.41
C	77.7	(36)	R	71.1	(34)	W	66.9	(44)
C	77.7	t 1.68	C	77.7	t 2.89	R	71.1	t 1.13
R	71.1	(38)	W	66.9	(48)	W	66.9	(46)

Major - Minor

C	76.0	t 4.77	C	76.0	t 2.18	R	44.2	t 2.23
R	44.2	(44)	W	62.7	(55)	W	62.7	(51)

Final Test

G	33.3	t 3.00	G	33.3	3.12	G	33.3	t 1.72
C	40.6	(42)	R	39.3	(37)	W	30.3	(45)
C	40.6	t .54	C	40.6	t 5.13	R	39.3	t 5.24
R	39.3	(47)	W	30.3	(55)	W	30.3	(50)

Growth Scores

School G

Farnum	Pre	70.1	t .54	Drake	69.5	t 1.22
	Post	74.5	(32)		79.1	(32)
Colwell		59.1	t 2.97	Keyboard	46.2	t 6.00
		46.7	(34)		68.7	(33)

C

Farnum	61.0	t 4.35	Drake	50.0	t .059
	89.0	(46)		49.9	(46)
Colwell	47.2	t 2.41			
	40.6	(50)			

R

Farnum	46.6	t 3.10	Drake	64.7	t 7.52
	73.1	(42)		45.2	(43)
Colwell	43.6	t 1.72			
	39.3	(40)			

W

Farnum	55.3	t 2.24	Drake	50.1	t .76
	71.2			48.1	
Colwell	43.2	t 4.90	Keyboard	59.4	t 3.97
	30.3			43.2	

Control Group

Farnum Music Notation Test

1	74.4	t 1.11	1	74.4	t .57	1	74.4	t 1.89
C	66.2	(47)	G	70.1	(41)	R	59.0	(44)
1	74.4	t 1.54						
W	64.3	(51)						

School Comparison

Farnum Music Notation Test

C	66.2	t .27	C	66.2	t .47	C	66.2	t .81
W	64.3	(50)	G	70.1	(40)	R	59.0	(43)
R	59.0	t .66	G	70.1	t 1.20	G	70.1	t .79
W	64.3	(47)	R	59.0	(37)	W	64.3	(44)

Common Teacher

School 4

1) lakf
2) kfla
3) flak
4) akfl
5) flak(2)

IQ

lakf	110.6	t 2.41	lakf	110.6	t .308	lakf	110.6	t .029
kfla	120.4	(49)	flak	111.9	(52)	akfl	110.5	(53)
lakf	110.6	t .49	kfla	120.4	t 2.11	kfla	120.4	(50)
flak(2)	112.7	(50)	flak	111.9	(49)	akfl	110.5	(50)
kfla	120.4	t 1.84	flak	111.9	t .41	flak	111.9	t .20
flak(2)	112.7	(47)	akfl	110.5	(53)	flak(2)	112.7	(50)
akfl	110.5	t .65						
flak(2)	112.7	(51)						

ITBS

lakf	62.92	t .32	lakf	62.92	t .18	lakf	62.96	t .54
kfla	64.00	(51)	flak	62.33	(52)	akfl	64.82	(53)
lakf	62.92	t 1.40	kfla	64.00	t .47	kfla	64.00	t .23
flak(2)	68.88	(51)	flak	62.33	(51)	akfl	64.82	(52)
kfla	64.00	t 1.11	flak	62.33	t .66	flak	62.33	t 1.45
flak(2)	68.88	(50)	akfl	64.82	(53)	flak(2)	68.88	(51)
akfl	64.82	t .90						
flak(2)	68.88	(52)						

SEASHORE MEASURES OF MUSICAL TALENT

Pitch

lakf	54.96	t 1.45	lakf	54.96	t .092	lakf	54.96	t .89
kfla	65.50	(50)	flak	55.69	(50)	akfl	61.84	(50)
lakf	54.96	t .98	kfla	65.50	t 1.33	kfla	65.50	t .51
flak(2)	61.84	(50)	flak	55.69	(50)	akfl	61.84	(50)
kfla	65.50	t .57	flak	55.69	t .79	flak	55.69	t .86
flak(2)	61.84*	(50)	akfl	61.84	(50)	flak(2)	61.84	(50)
akfl	61.84*	t .00						
flak(2)	61.84	(50)						

*Identical scores through seven places.

2-7

Loudness

lafk	39.88	t .13	lakf	39.88	t 1.57	lakf	39.88	t .18
kfla	39.11	(50)	flak	51.00	(50)	akfl	41.19	(50)
lakf	39.88	t 1.14	kfla	39.12	t 1.70	kfla	39.12	t .29
flak(2)	47.08	(50)	flak	51.00	(50)	akfl	41.19	(50)
kfla	39.12	t 1.28	flak	51.00	t 1.23	flak	51.00	t .55
flak(2)	47.08	(50)	akfl	41.19	(50)	flak(2)	47.08	(50)
akfl	41.19	t .81						
flak(2)	47.08	(50)						

Rhythm

lakf	60.38	t 1.76	lakf	60.38	t .85	lakf	60.38	t 1.29
kfla	73.38	(50)	flak	66.81	(50)	akfl	70.50	(50)
lakf	60.38	t .36	kfla	73.38	t .90	kfla	73.38	t .38
flak(2)	57.31	(50)	flak	66.81	(50)	akfl	70.50	(50)
kfla	73.38	t 1.91	flak	66.81	t .48	flak	66.81	t 1.11
flak(2)	57.31	(50)	akfl	70.50	(50)	flak(2)	57.31	(50)
akfl	70.50	t 1.50						
flak(2)	57.31	(50)						

Time

lakf	44.00	t .64	lakf	44.00	t .46	lakf	44.00	t 1.11
kfla	48.92	(51)	flak	40.14	(52)	akfl	53.85	(51)
lakf	44.00	t .76	kfla	48.92	t 1.14	kfla	48.92	t .59
flak(2)	50.00	(50)	flak	40.14	(51)	akfl	53.85	(50)
kfla	48.92	t .15	flak	40.14	t 1.54	flak	40.14	t 1.25
flak(2)	50.00	(49)	akfl	53.85	(51)	flak(2)	50.00	(50)
akfl	53.85	t .45						
flak(2)	50.00	(49)						

Timbre

lakf	60.30	t .58	lakf	60.30	t .29	lakf	60.30	t .27
kfla	64.62	(51)	flak	62.59	(52)	akfl	58.12	(51)
lakf	60.30	t 1.25	kfla	64.62	t .26	kfla	64.62	t .82
flak(2)	69.56	(50)	flak	62.59	(51)	akfl	58.12	(50)
kfla	64.62	t .70	flak	62.59	t .53	flak	62.59	t .90
flak(2)	69.56	(49)	akfl	58.12	(51)	flak(2)	69.56	(50)
akfl	58.12	t 1.45						
flak(2)	69.56	(49)						

Tonal Memory

lakf	59.19	t 1.07	lakf	59.19	t .18	lakf	59.19	t .154
kfla	67.08	(51)	flak	60.59	(52)	akfl	58.77	(51)
lakf	59.19	t .18	kfla	67.08	t .91	kfla	67.08	t 1.21
flak(2)	60.60	(50)	flak	60.59	(51)	akfl	58.77	(50)
kfla	67.08	t .89	flak	60.59	t .25	flak	60.59	t .0009
flak(2)	60.60	(49)	akfl	58.77	(51)	flak(2)	60.60	(50)
akfl	58.77	t .24						
flak(2)	60.60	(49)						

Drake Musical Memory Pretest

lakf	74.73	t .076	lakf	74.73	t 1.15	lakf	74.73	t .056
kfla	74.27	(50)	flak	67.08	(50)	akfl	74.38	(48)
lakf	74.73	t .48	kfla	74.27	t 1.19	kfla	74.27	t .018
flak(2)	77.58	(50)	flak	67.08	(50)	akfl	74.38	(48)
kfla	74.27	t .63	flak	67.08	t 1.13	flak	67.08	t 1.77
flak(2)	77.58	(50)	akfl	74.38	(48)	flak(2)	77.58	(50)
akfl	74.38	t .57						
flak(2)	77.58	(48)						

Drake Musical Memory Posttest

lakf	88.20	t 1.40	lakf	88.20	t .85	lakf	88.20	t .16
kfla	93.08	(48)	flak	91.22	(50)	akfl	88.88	(47)
lakf	88.20	t 2.55	kfla	93.08	t .59	kfla	93.08	t 1.10
flak(2)	95.50	(49)	flak	91.22	(50)	akfl	88.88	(47)
kfla	93.08	t 1.03	flak	91.22	t .60	flak	91.22	t 1.68
flak(2)	95.50	(49)	akfl	88.88	(49)	flak(2)	95.50	(51)
akfl	88.88	t 2.04						
flak(2)	95.50	(48)						

Colwell Pretest

lakf	54.11	t 1.73	lakf	54.11	t .064	lakf	54.11	t 1.11
kfla	58.88	(51)	flak	53.96	(51)	akfl	57.04	(51)
lakf	54.11	t 2.02	kfla	58.88	t 1.98	kfla	58.88	t .67
flak(2)	59.50	(47)	flak	53.96	(50)	akfl	57.04	(50)
kfla	58.88	t .22	flak	53.96	t 1.31	flak	53.96	t 2.39
flak(2)	59.50	(46)	akfl	57.04	(50)	flak(2)	59.50	(46)
akfl	57.04	t .92						
flak(2)	59.50	(46)						

Colwell Posttest

lakf	55.83	t .99	lakf	55.83	t .0060	lakf	55.83	t .67
kfla	59.45	(45)	flak	55.85	(47)	akfl	58.29	(45)
lakf	55.83	t 1.99	kfla	59.45	t 1.11	kfla	59.45	t .32
flak(2)	62.72	(46)	flak	55.85	(48)	akfl	58.29	(46)
kfla	59.45	t .96	flak	55.85	t .75	flak	55.85	t 2.27
flak(2)	62.72	(47)	akfl	58.29	(48)	flak(2)	67.72	(49)
akfl	58.29	t 1.30						
flak(2)	62.72	(47)						

Keyboard Final

lakf	71.40	t 2.90	lakf	71.40	t .87	lakf	71.40	t .60
kfla	58.85	(49)	flak	68.65	(49)	akfl	69.23	(49)
lakf	71.40	t 1.69	kfla	58.85	t 2.27	kfla	58.85	t 2.24
flak(2)	76.30	(50)	flak	68.65	(50)	akfl	69.23	(50)
kfla	58.85	t 4.26	flak	68.65	t .16	flak	68.65	t 2.60
flak(2)	76.30	(51)	akfl	69.23	(50)	flak(2)	76.30	(51)
akfl	69.23	t 2.10						
flak(2)	76.30	(51)						

Aural Final

lakf	53.44	t 2.66	lakf	53.44	t 2.79	lakf	53.44	t 2.33
kfla	64.08	(47)	flak	63.46	(49)	akfl	60.74	(50)
lakf	53.44	t 3.49	kfla	64.08	t .16	kfla	64.08	t .95
flak(2)	65.84	(49)	flak	63.46	(48)	akfl	60.74	(49)
kfla	64.08	t .45	flak	63.46	t .88	flak	63.46	t .68
flak(2)	65.84	(48)	akfl	60.74	(51)	flak(2)	65.84	(50)
akfl	60.74	t 1.67						
flak	65.84	(51)						

Factual Final

lakf	65.83	t 2.45	lakf	65.83	t 4.15	lakf	65.83	t 2.08
kfla	79.00	(45)	flak	80.55	(48)	akfl	74.38	(47)
lakf	65.83	t 3.25	kfla	79.00	t .35	kfla	79.00	t .94
flak(2)	79.60	(46)	flak	80.55	(49)	akfl	74.38	(48)
kfla	79.00	t .12	flak	80.55	t 1.94	flak	80.55	t .29
flak(2)	79.60	(47)	akfl	74.38	(51)	flak(2)	79.60	(50)
akfl	74.38	t 1.36						
flak(2)	79.60	(49)						

Listening Final

lakf	53.67	t .17	lakf	53.67	t 1.66	lakf	53.67	t 1.04
kfla	54.18	(44)	flak	46.56	(47)	akfl	48.92	(48)
lakf	53.67	t .19	kfla	54.18	t 1.89	kfla	54.18	t 1.20
flak(2)	54.56	(47)	flak	46.56	(45)	akfl	48.92	(46)
kfla	54.18	t .083	flak	46.56	t .55	flak	46.56	t 1.80
flak(2)	54.56	(45)	akfl	48.92	(49)	flak(2)	54.56	(48)
akfl	48.92	t 1.20						
flak(2)	54.56	(49)						

Final Test

lakf	43.60	t .30	lakf	43.60	t 1.41	lakf	43.60	t .089
kfla	42.88	(48)	flak	46.23	(49)	akfl	43.78	(50)
lakf	43.60	t 1.90	kfla	42.88	t 1.50	kfla	42.88	t .38
flak(2)	47.62	(47)	flak	46.23	(49)	akfl	43.78	(50)
kfla	42.88	t 1.92	flak	46.23	t 1.32	flak	46.23	t .71
flak(2)	47.62	(47)	akfl	43.78	(51)	flak(2)	47.62	(48)
akfl	43.78	t 1.83						
flak(2)	47.62	(49)						

Blank Score I

lakf	36.26	t 1.66	lakf	36.26	t .069	lakf	36.36	t 2.81
kfla	43.92	(49)	flak	36.62	(51)	akfl	48.96	(52)
lakf	36.26	t .36	kfla	43.92	t 1.48	kfla	43.92	t 1.19
flak(2)	38.04	(51)	flak	36.62	(48)	akfl	48.96	(49)
kfla	43.92	t 1.24	flak	36.62	t 2.55	flak	36.62	t .27
flak(2)	38.04	(48)	akfl	48.96	(51)	flak(2)	38.04	(50)
akfl	48.96	t 2.35						
flak(2)	38.04	(51)						

Blank Score II

lakf	41.91	t 1.24	lakf	41.91	t .039	lakf	41.91	t 3.53
kfla	49.55	(42)	flak	42.13	(44)	akfl	63.45	(42)
lakf	41.91	t .63	kfla	49.55	t 1.38	kfla	49.55	t 2.36
flak(2)	38.81	(46)	flak	42.13	(44)	akfl	63.45	(42)
kfla	49.55	t 2.28	flak	42.13	t 4.03	flak	42.13	t .80
flak(2)	38.81	(46)	akfl	63.45	(44)	flak(2)	38.81	(48)
akfl	63.45	t 5.31						
flak(2)	38.81	(46)						

Appendix III

One Semester Group

Schools

G 207-AL; R 303-AL(2), 305-FL; C 309-FL(2)

IQ

AL[1]	108.9[2]	t 2.50	AL	108.9	t 1.69	AL	108.9	t 3.90
AL(2)	100.8	(38)[3]	FL	101.8	(34)	FL(2)	93.0	(27)
AL(2)	100.8	t .27	AL(2)	100.8	t 2.23	FL	101.8	t 1.89
FL	101.8	(42)	FL(2)	93.0	(35)	FL(2)	93.0	(31)

ITBS

AL	56.12	t 1.58	AL	56.12	t 1.87	AL	56.12	t 4.08
AL(2)	49.12	(40)	FL	47.47	(34)	FL(2)	40.18	(32)
AL(2)	49.12	t .41	AL(2)	49.12	t 2.56	FL	47.47	t 2.16
FL	47.47	(42)	FL(2)	40.18	(40)	FL(2)	40.18	(34)

SEASHORE MEASURES OF MUSICAL TALENT

Pitch

AL	58.1	t 1.25	AL	58.1	5 2.23	AL	58.1	t .21
AL(2)	46.8	(40)	FL	37.0	(37)	FL(2)	55.8	(32)
AL(2)	46.8	t 1.25	AL(2)	46.8	t 1.00	FL	37.0	t 2.00
FL	37.0	(45)	FL(2)	55.8	(40)	FL(2)	55.8	(37)

Loudness

AL	41.8	t 2.46	AL	41.8	t 1.03	AL	41.8	t .52
AL(2)	26.0	(40)	FL	33.7	(37)	FL(2)	37.6	(32)
AL(2)	26.0	t 1.16	AL(2)	26.0	t 1.73	FL	33.7	t .48
FL	33.7	(45)	FL(2)	37.6	(40)	FL(2)	37.6	(37)

Rhythm

AL	70.3	t 2.09	AL	70.3	t .95	AL	70.3	t .92
AL(2)	47.5	(40)	FL	60.2	(37)	FL(2)	60.2	(32)
AL(2)	47.5	t 1.25	AL(2)	47.5	t 1.18	FL	60.2	t .005
FL	60.2	(45)	FL(2)	60.2	(40)	FL(2)	60.2	(37)

Time

AL	66.1	t 1.77	AL	66.1	t 2.99	AL	66.1	t 3.02
AL(2)	49.1	(40)	FL	39.5	(37)	FL(2)	41.2	(32)
AL(2)	49.1	t 1.06	AL(2)	49.1	t .86	FL	39.5	t .21
FL	39.4	(45)	FL(2)	41.2	(40)	FL(2)	41.2	(37)

[1] Experience

[2] Mean score

[3] degrees of freedom

Timbre

AL	71.65	t 4.86	AL	71.65	t 4.32	AL	71.65	t 1.70
AL(2)	30.6	(40)	FL	33.09	(37)	FL(2)	56.35	(32)
AL(2)	30.6	t .29	AL(2)	30.6	t 2.92	FL	33.09	t 2.49
FL	33.09	(45)	FL(2)	56.35	(40)	FL(2)	56.35	(37)

Tonal Memory

AL	78.94	t 4.51	AL	78.94	t 3.68	AL	78.94	t 2.23
AL(2)	42.53	(40)	FL	41.55	(37)	FL(2)	58.76	(32)
AL(2)	42.53	t .11	AL(2)	42.52	t 1.88	FL	41.55	t 1.61
FL	41.55	(45)	FL(2)	58.76	(40)	FL(2)	58.76	(37)

Drake Musical Memory Pretest

AL	74.94	t .27	AL	74.94	t .95	AL	74.94	t 3.05
AL(2)	76.96	(39)	FL	80.95	(36)	FL(2)	53.12	(31)
AL(2)	76.96	t .63	AL(2)	76.96	t 3.32	FL	80.95	t 4.51
FL	80.95	(45)	FL(2)	53.12	(40)	FL(2)	53.12	(37)

Drake Musical Memory Posttest

AL	81.63	t .77	AL	81.63	t .91	AL	81.63	t .34
AL(2)	86.70	(37)	FL	87.31	(30)	FL(2)	79.44	(30)
AL(2)	86.70	t .093	AL(2)	86.70	t 1.07	FL	87.31	t 1.20
FL	87.31	(37)	FL(2)	79.44	(37)	FL(2)	79.44	(30)

Colwell Pretest

AL	52.59	t 1.51	AL	52.59	t 1.64	AL	52.59	t 1.93
AL(2)	58.56	(40)	FL	59.36	(37)	FL(2)	60.87	(31)
AL(2)	58.56	t .29	AL(2)	58.56	t .85	FL	59.36	t .55
FL	59.36	(45)	FL(2)	60.87	(39)	FL(2)	60.87	(36)

Colwell Posttest

AL(2)	79.2	t 6.46
FL	44.3	(24)

Aural I

AL	45.6	t .89
AL(2)	52.3	(38)

Aural II

AL	72.9	t 2.76
AL(2)	60.0	(34)

Aural Final

AL	45.6	t 1.51
AL(2)	38.8	(37)

Factual I

FL	66.6	t 1.36
FL(2)	62.1	(37)

Factual II

FL	78.9	t 1.20
FL(2)	84.5	(34)

Factual III

FL	61.7	t 5.94
FL(2)	82.3	(34)

Listening I

AL	76.8	t 2.92
AL(2)	61.6	(40)

Listening II

AL	56.9	t 4.90	AL	56.9	t 2.02	AL(2)	37.7	t 9.85
AL(2)	37.7	(38)	FL	65.4	(35)	FL	65.4	(41)

Final

AL	37.19	t 2.54	AL	37.19	t 1.31	AL	37.19	t .79
AL(2)	32.08	(39)	FL	40.00	(33)	FL(2)	38.85	(27)
AL(2)	32.08	t 4.24	AL(2)	32.08	t 3.54	FL	40.00	t .58
FL	40.00	(42)	FL(2)	38.85	(36)	FL(2)	38.85	(30)

Growth Scores

Drake

74.9	t .99
81.6	(30)
77.0	t 1.46
86.7	(46)
81.0	t 1.07
87.3	(36)
53.1	t 3.82
79.4	(31)

AL

1

AL(2)

FL

FL(2)

Colwell

58.6	t 3.79
79.2	(29)
59.4	t 5.44
44.3	(40)

3-4

School C

A KF AK
C 301, 309, 310

IQ

A	100.32	t .57	A	100.32	t 1.19	KF	102.3	t .69
KF	102.3	(37)	AK	104.89	(35)	AK	104.89	(36)

ITBS

A	47.56	t .34	A	47.56	t 1.07	KF	49.4	t .84
KF	49.4	(35)	AK	53.0	(32)	AK	53.0	(37)

SEASHORE MEASURES OF MUSICAL TALENTS

Pitch

A	52.1	t .034	A	52.1	5 .019	KF	51.8	t .011
KF	51.8	(45)	AK	51.9	(38)	AK	51.9	(41)

Loudness

A	39.68	t .091	A	39.68	t 1.29	KF	40.36	t 1.10
KF	40.36	(45)	AK	49.00	(38)	AK	49.00	(41)

Rhythm

A	57.64	t .15	A	57.64	t .087	KF	59.08	t .26
KF	59.08	(45)	AK	56.78	(38)	AK	56.78	(41)

Time

A	45.68	t .15	A	45.68	t .40	KF	46.92	t .26
KF	46.92	(45)	AK	49.17	(38)	AK	49.17	(41)

Timbre

A	42.5	5 .66	A	42.5	t .93	KF	48.8	t .21
KF	48.8	(45)	AK	50.7	(38)	AK	50.7	(41)

Tonal Memory

A	63.2	t 1.25	A	63.2	t 1.91	KF	50.5	t .64
KF	50.5	(45)	AK	43.9	(38)	AK	43.9	(41)

Drake Musical Memory Pretest

A	75.9	t .73	A	75.9	t 1.94	KF	81.7	t 3.42
KF	81.7	(42)	AK	57.9	(37)	AK	57.9	(39)

Drake Musical Memory Posttest

A	85.3	t 2.09	A	85.3	t 3.08	KF	67.9	t .89
KF	67.9	(41)	AK	60.5	(34)	AK	60.5	(39)

Colwell Pretest

A	54.5	t .27	A	54.5	t 1.10	KF	55.4	t 1.05
KF	55.4	(41)	AK	58.7	(36)	AK	58.7	(39)

Colwell Posttest

A	43.8	t .77
AK	45.5	(41)

Keyboard I

KF	63.5	t 5.52
AK	92.3	(36)

Keyboard II

KF	51.0	t 4.21
AK	66.7	(14)

Aural I

A	58.9	t 1.09
AK	68.1	(35)

Aural II

A	68.5	t .85
AK	63.4	(38)

Aural III

A	42.3	t 1.16
AK	50.6	(35)

Aural Final

A	43.9	t 5.21
AK	67.8	(37)

Final

A	32.1	t 2.55	A	32.1	t 2.60	AK	37.0	t .084
AK	37.0	(40)	AK	37.2	(33)	AK	37.2	(37)

Growth Scores

Drake			Colwell	
75.9	t 1.02	A	54.5	t 3.28
85.3	(38)		43.8	(39)
81.7	t 1.93	KF	55.4	t 4.19
67.9	(45)		45.5	(43)
57.9	t .33	AK		
60.5	(33)			

3-6

Same Teacher

School G

207 AL
204 Lyke K

IQ

AL	108.9	t 1.06
K	104.3	(30)

ITBS

AL	56.12	t 1.08
K	50.3	(31)

Pitch

AL	58.1	t .45
K	62.4	(33)

Loudness

AL	41.9	t .74
K	48.1	(33)

Rhythm

AL	70.3	t .087
K	71.2	(33)

Time

AL	66.1	t .097
K	66.9	(33)

Timbre

AL	71.6	t .67
K	66.4	(33)

Drake Musical Memory Pretest

AL	74.9	t .67
K	69.5	(31)

Drake Musical Memory Posttest

AL	81.6	t .39
K	79.1	(31)

Colwell Pretest

AL	52.6	t 1.36
K	59.0	(33)

Final Test

AL 37.2 t 1.88
K 33.3 (31)

Growth Scores

Drake		Colwell	
59.1	t 2.97	46.2	t 4.25
46.7	(34)	33.3	(33)

School R

305 FL
313 AL
209 K

IQ

FL	101.8	t .29	FL	101.8	t .13	AL	100.8	t .47
AL	100.8	(42)	K	102.3	(41)	K	102.3	(45)

ITBS

FL	47.5	t .41	FL	47.5	t 1.19	AL	49.1	t .86
AL	49.1	(42)	K	52.6	(40)	K	52.6	(46)

SEASHORE MEASURES OF MUSICAL TALENTS

Pitch

FL	37.0	t 1.25	FL	37.0	t 1.08	AL	46.8	t .023
AL	46.8	(45)	K	46.6	(43)	K	46.6	(46)

Loudness

FL	33.7	t 1.16	FL	33.7	t 1.01	AL	26.0	t 2.50
AL	26.0	(45)	K	41.0	(43)	K	41.0	(46)

Rhythm

FL	60.2	t 1.25	FL	60.2	t 1.44	AL	47.5	t 2.79
AL	47.5	(45)	K	73.0	(43)	K	73.0	(46)

Time

FL	39.5	t 1.06	FL	39.5	t 1.18	AL	49.1	t .045
AL	49.1	(45)	K	49.5	(43)	K	49.5	(46)

Timbre

FL	33.1	t .29	FL	33.1	t 2.73	AL	30.6	t 3.20
AL	30.6	(45)	K	56.1	(43)	K	56.1	(46)

Tonal Memory

FL	41.5	t .106	FL	41.5	t .33	AL	42.5	t .28
AL	42.5	(45)	K	44.6	(43)	K	44.6	(46)

Drake Musical Memory Pretest

FL	81.0	t .63	FL	81.0	t .24	AL	77.0	t .81
AL	77.0	(45)	K	82.14	(42)	K	82.4	(45)

Drake Musical Memory Posttest

FL	87.3	t .093	FL	87.3	t 1.99	AL	86.7	t 1.97
AL	86.7	(37)	K	73.1	(35)	K	73.1	(42)

Colwell Pretest

FL	59.4	t .29	FL	59.4	t 1.77	AL	58.6	t 2.10
AL	58.6	(45)	K	64.7	(43)	K	64.7	(46)

Colwell Posttest

FL	44.3	t 6.46	FL	44.3	t .408	AL	79.2	t 7.13
AL	79.2	(24)	K	45.2	(40)	K	45.2	(26)

Listening II

FL	65.4	t 9.85
AL	37.7	(41)

Final Test

FL	40.0	t 4.24	FL	40.0	t .35	AL	32.1	t 3.96
AL	32.1	(42)	K	39.3	(39)	K	39.3	(45)

Growth Scores

Drake			Colwell	
81.0	t 1.07	FL	59.4	t 5.44
87.3	(36)		44.3	(40)
77.0	t 1.46	AL	48.6	t 3.79
86.7	(46)		79.2	(29)
82.4	t 1.35	K	64.7	t 7.52
73.1	(41)		45.2	(43)

School C

309 K
310 AK
311 FL

IQ

K	106.2	t .42	K	106.2	t 4.09	AK	104.8	t 2.77
AK	104.8	(39)	FL	93.0	(34)	FL	93.0	(29)

ITBS

K	54.2	t .34	K	54.2	t 4.81	AK	53.0	t 4.30
AK	53.0	(42)	FL	40.2	(41)	FL	40.2	(33)

SEASHORE MEASURES OF MUSICAL TALENTS

Pitch

K	61.0	t .99	K	61.0	t .56	AK	51.9	t .37
AK	51.9	(42)	FL	55.8	(41)	FL	55.8	(33)

Loudness

K	48.0	t 2.73	K	48.0	t 1.39	AK	49.0	t 1.43
AK	49.0	(42)	FL	37.6	(41)	FL	37.6	(33)

Rhythm

K	75.7	t 2.72	K	75.7	t 1.90	AK	56.7	t .36
AK	56.7	(42)	FL	60.2	(41)	FL	60.2	(33)

Time

K	50.4	t .17	K	50.4	t 1.34	AK	49.2	t .98
AK	49.2	(42)	FL	41.2	(41)	FL	41.2	(33)

Timbre

K	72.3	t 3.03	K	72.3	t 2.08	AK	50.7	t .64
AK	50.7	(42)	FL	56.4	(41)	FL	56.4	(33)

Tonal Memory

K	56.2	t 1.46	K	56.2	t .30	AK	43.9	t 1.52
AK	43.9	(41)	FL	58.7	(40)	FL	58.7	(33)

Drake Musical Memory Pretest

K	64.5	t .91	K	64.5	t 1.66	AK	57.9	t .63
AK	57.9	(41)	FL	53.1	(40)	FL	53.1	(33)

Drake Musical Memory Posttest

K	89.0	t 5.39	K	89.0	t 2.02	AK	89.0	t 2.60
AK	60.5	(37)	FL	79.4	(36)	FL	79.4	(31)

Colwell Pretest

K	50.0	t 2.56	K	50.0	t 3.61	AK	58.7	t .74
AK	58.7	(39)	FL	60.9	(37)	FL	60.9	(32)

Keyboard I

K	82.2	t 2.64
AK	92.3	(38)

Keyboard II

K	95.2	t 24.8
AK	66.7	(37)

Keyboard III

K	82.5	t 4.74
AK	70.2	(40)

Final Test

K	40.6	t 1.30	K	40.6	t .69	AK	37.2	t .78
AK	37.2	(41)	FL	38.8	(38)	FL	38.8	(27)

Growth Scores

Drake			Colwell	
64.5	t 4.69	K	50.0	t .059
89.0	(45)		49.9	(46)
57.9	t .33	AK		
60.5	(33)			
53.1	t 3.82	FL		
79.4	(31)			

3-12

School Co

IQ

A	100.3	t .57	A	100.3	t .40	KF	102.3	t 1.01
KF	102.3	(37)	K	99.0	(48)	K	99.0	(49)

ITBS

A	47.6	t .34	A	47.6	t .42	KF	49.4	t .006
KF	49.4	(35)	K	49.5	(45)	K	49.5	(50)

SEASHORE MEASURES OF MUSICAL TALENTS

Pitch

A	52.1	t .034	A	52.1	t .40	KF	51.8	t .48
KF	51.8	(45)	K	55.3	(52)	K	55.3	(55)

Loudness

A	39.7	t .092	A	39.7	t .50	KF	40.4	t .37
KF	40.4	(45)	K	42.8	(52)	K	42.8	(55)

Rhythm

A	57.6	t .15	A	57.6	t 1.22	KF	59.1	t 1.16
KF	59.1	(45)	K	67.5	(52)	K	67.5	(55)

Time

A	45.7	t .15	A	45.7	t .43	KF	46.9	t .25
KF	46.9	(45)	K	48.7	(52)	K	48.7	(55)

Timbre

A	42.5	t .66	A	42.5	t 1.65	KF	48.8	t .84
KF	48.8	(45)	K	55.7	(52)	K	55.7	(55)

Tonal Memory

A	63.2	t 1.25	A	63.2	t .20	KF	50.5	t 1.61
KF	50.5	(45)	K	65.0	(52)	K	65.0	(55)

Drake Musical Memory Pretest

A	75.9	t .73	A	75.9	t .94	KF	81.7	t .20
KF	81.7	(42)	K	82.8	(47)	K	82.8	(49)

Drake Musical Memory Posttest

A	85.3	t 2.09	A	85.3	t 1.75	KF	67.9	t .42
KF	67.9	(41)	K	71.2	(43)	K	71.2	(48)

Colwell Pretest

A	54.5	t .27	A	54.5	t 1.25	KF	55.4	t 1.74
KF	55.4	(41)	K	50.1	(48)	K	50.1	(51)

Colwell Posttest

A	43.8	t .77	A	43.8	t 1.91	KF	45.5	t 1.30
KF	45.5	(41)	K	48.1	(49)	K	48.1	(50)

Keyboard I

KF	63.5	t .86
K	59.4	(45)

Keyboard II

KF	51.0	t 3.27
K	85.5	(22)

Keyboard Posttest

KF	60.0	t .74
K	51.4	(38)

Final

A	32.1	t 2.55	A	32.1	t 1.11	KF	37.0	t 3.75
KF	37.0	(40)	K	30.3	(47)	K	30.0	(31)

Growth Scores

Drake			Colwell	
75.9	t 1.02	A	54.5	t 3.28
85.3	(38)		43.8	(39)
81.7	t 1.93	KF	55.4	t 4.19
67.9	(45)		45.5	(43)
82.8	t 1.82	K	50.1	t .76
71.2	(52)		48.1	(58)

IV-1

Listening Test 1

1. T F Time in music is more steady than the time of a clock.

2. Which beat in every measure is usually accented?________________

3. How many beats or pulses are there in a waltz?________________

4. Your teacher will now count two measures of music. Would you say this would be for fast music or slow music?________________

5. Listen to the following numbers played on the piano and decide if they are in two beats to the bar or three beats to the bar.

   a. ________________________

   b. ________________________

   c. ________________________

6. T F If one part of a piece is fast and another part slow, these two parts are contrasting parts in tempo.

7. T F A motif is the smallest possible theme.

8. Listen to the following melodies. In general, does each move scalewise or skipwise?

   a. ________________________

   b. ________________________

   c. ________________________

9. T F Music with large skips in the melody line usually does not sound as smooth as scalewise melodies.

10. T F When we speak of the "register" the music was played in, we are speaking of how fast or how slow the music was played.

11. T F Trills and grace notes are "ornaments" in music.

IV-2

Listening Test 2

1. Define a Coda______________________________

2. Name some of the instruments in the brass family. __________
____

3. What is the meter of a waltz?______________________

4. Rank these notes in order from longest to shortest. 𝅗𝅥 ♪ 𝅘𝅥𝅯 ♩

longest______________________

to ______________________

shortest______________________

____

5. Write out how you would count one measure of quarter notes in $\frac{3}{4}$ time. Show the accent by placing the symbol > on the strong pulse.

____

6. Listen to this melody played by the tape recorder. Answer the following questions, circling the correct answer.

Does the melody move by.....skip

scale

Is the melody in a ....high register

medium register

low register

Are there any ornaments in the melody line...yes

no

Is the melody...............calm

excited

Does the melody have a......wide range

narrow range

Listening Test 2

page two

7. Answer these questions over the second number on the tape:

Is the meter not regular (does it get faster and slower)? Yes No

Does the number have any dynamics (does it get louder and softer)? Yes No

Is the melody repeated in this short example? Yes No

Is this a fast piece? Yes No

How many bars of music were there in the first theme?

4 5 6 7 8

What is the meter of the piece? $\frac{2}{4}$ $\frac{3}{4}$

What instrument has the melody? ______________________________

Is the melody..................Rising

Falling

Is the number in...............Major

Minor

Listening Test 3

You will hear two different pieces of music. Listen carefully to short sections of each and answer the question comparing the two pieces. Place a check by the correct answer. There may be more than one correct answer to each question.

Section I

1. Which number is being played by a larger orchestra?
   1st number ___
   2nd number ___
   Both the same ___
2. Which number was probably written during the Classical Period?
   1st number ___
   2nd number ___
   Both the same ___
3. Which number has the longer melody?
   1st number ___
   2nd number ___
   Both the same ___
4. Which melody has the greater range?
   1st number ___
   2nd number ___
   Both the same ___
5. Which number uses crescendos rather than getting suddenly loud?
   1st number ___
   2nd number ___
   Both the same ___

Section II

1. Which melody is easy to sing?
   1st number ___
   2nd number ___
   Neither ___
2. Which number has a thicker texture, in other words, more notes in a chord?
   1st number ___
   2nd number ___
   About the same ___

Listening Test 3

page two

3. Which number has a rising melody? 1st number ___
2nd number ___
Neither ___

4. Which number has a smooth melody? 1st number ___
2nd number ___
Neither ___

Section III

1. Which number is in three beats to a measure? 1st number ___
2nd number ___
Both ___

2. What number has the stronger beat or accents? 1st number ___
2nd number ___
About the same ___

3. Which number has the most regular pulse like a metronome? 1st number ___
2nd number ___
About the same ___

4. Which number has repeated rhythm patterns? 1st number ___
2nd number ___
Can't tell ___

Section IV

1. Which number has the melody repeated? 1st number ___
2nd number ___
Both ___

2. Which number has the most stopping spots or phrases? 1st number ___
2nd number ___
About the same ___

Listening Test 3

page three

3. Which number has the fastest tempo? 1st number ___
2nd number ___
About the same ___

4. Which number is more exciting? 1st number ___
2nd number ___
About the same ___

Section V

1. Which number is in a minor key? 1st number ___
2nd number ___
Neither ___

2. Which number has the most obvious climax? 1st number ___
2nd number ___
About the same ___

3. Which number do you like better? 1st number ___
2nd number ___
About the same ___

4. Which number was louder? 1st number ___
2nd number ___
About the same ___

Listening Examination

Directions: Read all of the questions through before listening to the music the first time. Keep the questions in mind as you listen to each playing of the music, and try to answer a few questions each time the music is played. There is only one right answer to each question.

1. At the beginning of the piece, the first melody (or theme) is:
____a. played only once
____b. played twice, once loud and once soft
____c. played several times

2. The meter of the piece is:
____a. $\genfrac{}{}{0pt}{}{4}{4}$
____b. $\genfrac{}{}{0pt}{}{3}{4}$
____c. $\genfrac{}{}{0pt}{}{6}{8}$

3. The composition is being played by a:
____a. string quartet
____b. full symphony orchestra
____c. woodwind ensemble
____d. small orchestra

4. In listening to the music, one hears:
____a. only string instruments
____b. full symphony with a few woodwinds
____c. lots of brass
____d. lots of woodwinds

5. The piece has:
____a. only one melody or theme which is played throughout the piece
____b. several equally important melodies
____c. one important melody which keeps returning after other melodies have been played.

6. The music:
____a. is all the same speed throughout the piece
____b. has many accelerandos and decrescendos
____c. slows down only at the cadences.

7. The music:
____a. is fairly soft all the way through the piece
____b. is rather loud all the way through the piece
____c. has many gradual crescendos and diminuendos
____d. has soft sections followed by sudden loud sections

8. The tempo of the piece is:
____a. slow
____b. moderately fast
____c. alternately fast and slow

Listening Examination

page two

9. The style in which the music is written is:
    ____a. the melody on top with a chordal accompaniment
    ____b. several independent melodies played at once and fitting together (counterpoint)
    ____c. one principal melody on top with other less important melodies underneath

10. In the coda, or final section of the piece, the music sounds as if it:
    ____a. stops too soon, before it is really finished
    ____b. stops at exactly the spot the listener expects
    ____c. could stop before it actually does so

11. The harmonic structure of the piece:
    ____a. contains many unexpected and unusual chords
    ____b. contains familiar and "normal" sounding chord progressions
    ____c. in a lower register when soft and in a higher register when loud

13. Rhythmically, the music is:
    ____a. first simple, using mostly eighth notes and sixteenth notes
    ____b. full of complicated dance rhythms
    ____c. full of unexpected accents and jerky pulses

Factual Test 1

1. Give the dates of the Classical Period in Music.________________

2. Check the correct characteristics of the Classical Period:

   a. ____If every one used common sense and good taste, the world would be a better place.

   b. ____Music had a tendency to be very emotional.

   c. ____Music followed definite rules that could be understood by the mind.

   d. ____Everyone attempted to be very dignified in everything they did.

   e. ____Music was long and composers worked a long time in composing each number.

3. Musicians of the Classical Period are credited with discovering:

   T F The right combination of instruments to sound right which was the symphony orchestra.

   T F A musical form which could express classicism called the sonata.

4. Some classical composers were:

   ____ Haydn

   ____ Bach

   ____ Mozart

   ____ Gluck

   ____ Tchaikovsky

5. T F The Marriage of Figaro is a symphony written by Mozart.

6. T F An overture usually comes at the beginning of a long selection and uses many of the themes that are in the main part of the selection.

7. T F Mozart is remembered for writing more than one hundred symphonies.

8. T F Beethoven follows the "rules" on composing more closely than does Haydn.

9. T F A fugue is composed by following a set of directions, something like following a recipe when baking a cake.

10. T F A Greek vase and a Mozart symphony are both classical in style.

Factual Test 2

1. T F One can see the influence of Mozart in the music that Haydn composed in his later life.

2. Which composer was the real genius and wrote every kind of music well?

    ____Beethoven

    ____Haydn

    ____Mozart

3. Mozart and Haydn lived at the time of

    ____Abraham Lincoln

    ____George Washington

    ____Theodore Roosevelt

4. T F Mozart worked under the patronage system of the Esterhazy's most of his life.

5. T F We remember Mozart's operas better than those of Haydn today.

6. Name one opera of Mozart's. ______________________________

7. Check the characteristics of the patronage system from this list.

    ____Composers often had to write music quickly to provide new music for every occasion.

    ____A composer was more of a servant than an artist.

    ____A composer was free to write the music he could do best.

    ____A composer was assured a living, and an audience.

    ____Good musicians were in great demand.

    ____Musicians could become wealthy.

8. Check the characteristics of a Classic symphony from this list.

    ____A sonata for orchestra

    ____Normally in four movements or parts.

    ____Often the four movements were fast; slow; minuet; fast.

    ____Typically for chorus and orchestra.

    ____Often has more than one instrument on a part.

Factual Test 3

1. T F The more one knows about music, the more likely he is to enjoy music.

2. T F People living at the time of Haydn were able to enjoy his music because many of the tunes were popular tunes of the time.

3. T F Haydn's greatest symphonies were written for public concerts and not for the Esterhazy's.

4. T F Composers may disguise tunes by playing only a few notes of the tune.

5. T F List one way a composer achieves contrast in music. ______

____

6. T F Chamber music is performed by a small group of musicians, each playing his own part.

7. What is recitative in opera? ______________________

____

8. T F Concertos may be vocal or instrumental music.

9. What is a cadence? ______________________________

____

10. T F Sonatas may be vocal or instrumental music.

11. T F In Classical opera, the chorus became more important than it had been in the past.

12. What do these words mean to you?

Exposition ______________________________________

Development _____________________________________

Recapitulation ___________________________________

IV-12

Factual Test

1. Give the dates of the Classical Period in music. ______________

2. State some characteristics of that period. ____________________

____

3. T F Popular tunes sometimes appear in exact music.

4. Name some composers who are known as Classical composers. ______

____

5. Sonata form is expanded

____two-part music

____three-part music

____four-part music

6. What is the length of a regular phrase in Classical music?

____ 6 bars ____ 8 bars ____ 10 bars

7. Musicians of the Classical period are credited with discovering the

____ string quartet ____ symphony orchestra ____band ____opera

8. T F Mozart composed the Surprise Symphony.

9. How does a composer get contrast into his music? ______________

____

10. T F Folk tunes are characteristic of Haydn's music.

11. T F Recognizing form in music is one of the most important things to be able to do when listening to music.

12. Give an example of what is meant when musicians say that Mozart had a "good ear." ____

____

13. T F Mozart composed the Marriage of Figaro.

14. Is Mozart or Haydn more famous for their melodies? ____________

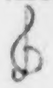
15. Name as many orchestral instruments as you can in the woodwind family.

____

IV-13

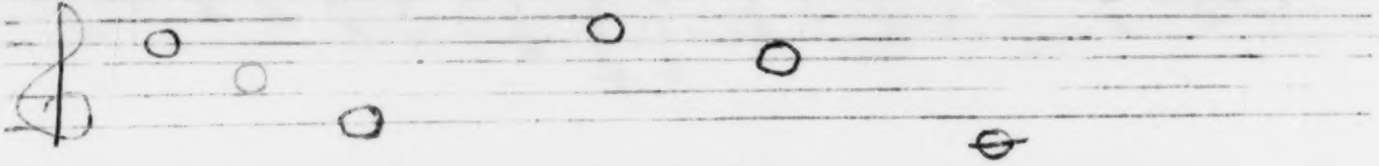
Aural Test 1

1. How many beats does a dotted quarter note receive in $\frac{2}{4}$ time? ____

2. Give the name for this music symbol.  ________________

3. What are leger lines? ____________________________

4. Put the letter names under the notes in the following example.



5. In a meter signature of $\frac{2}{4}$ what does the upper number mean? ____

   what does the lower number mean? ________________

6. What is the meter of the song Jingle Bells? ________________

7. Write either the numbers, syllables, or note names to America. Give an answer for each note in the piece. The first note is 1, do, or C.

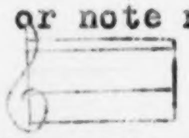
___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

___ ___ ___ ___ ___ ___ ___ ___ ___ ___

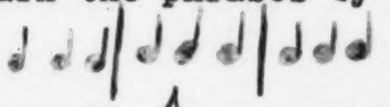
___ ___ ___ ___ ___ ___ ___ ___ ___ ___

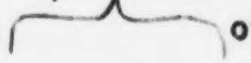
___ ___ ___ ___ ___ ___ ___ ___ ___ ___

8. Write a V Chord in C major, notes or note names

 ___ ___ ___

9. T F The end of a phrase is usually a tense place in music.

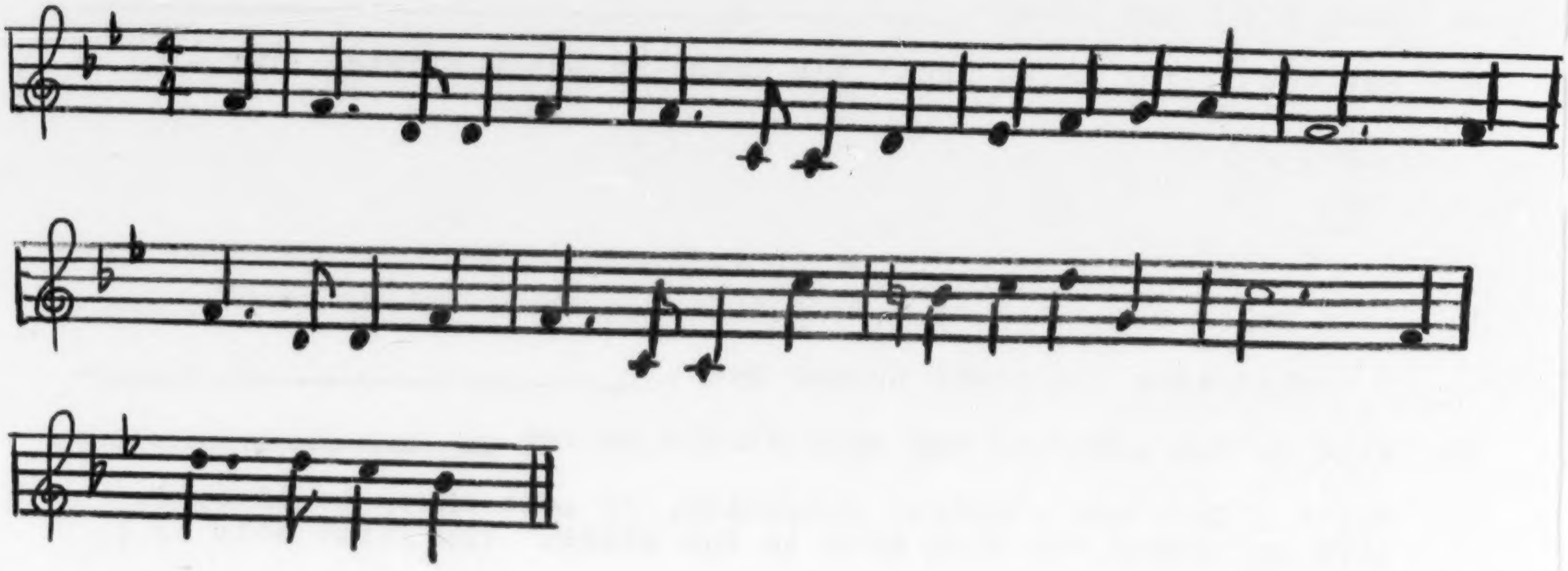
10. On the next sheet, mark the phrases by drawing a long line through the music like this: 

    Put a bracket like this  over the sections of music that are alike.

IV-14

Aural Test 1

page two



Aural Test 2

1. Listen carefully to two songs your teacher is about to play. Decide which song goes the highest and which song goes the lowest.

____Song 1 goes the highest ____Song 1 goes the lowest

____Song 2 goes the highest ____Song 2 goes the lowest

2. Listen carefully to two more songs and decide which song is in $\frac{3}{4}$ meter and which song is played in your singing range.

____Song 1 is in $\frac{3}{4}$ meter ____Song 2 is in $\frac{3}{4}$ meter

____Neither song is in $\frac{3}{4}$ meter

____Song 1 was in my singing range ___Song 2 was in my singing range

____Neither song was in my singing range

3. Listen carefully to two more songs and decide if they are both in the same key, in other words have the same home tone.

____Both were in the same key ____They were in different keys

4. On what beats in a measure do the strong or accented pulses fall? ____________

5. T F A phrase is usually three measures long and is a stopping place in music where one may take a breath.

6. You will now hear three chords played on the piano. Decide which are the I chords and which are the V^7 chords.

a. I Chord____ V^7Chord____

b. I Chord____ V^7Chord____

c. I Chord____ V^7Chord____

7. You will now hear two melodies played on the piano. Decide whether the second melody is the same as the first melody or different from the first melody.

a. Second melody same as first____ Second melody different____

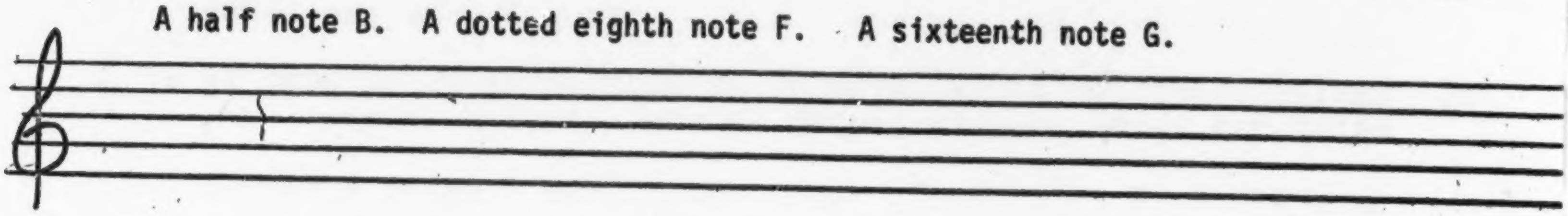
b. Second melody same as first____ Second melody different____

c. Second melody same as first____ Second melody different____

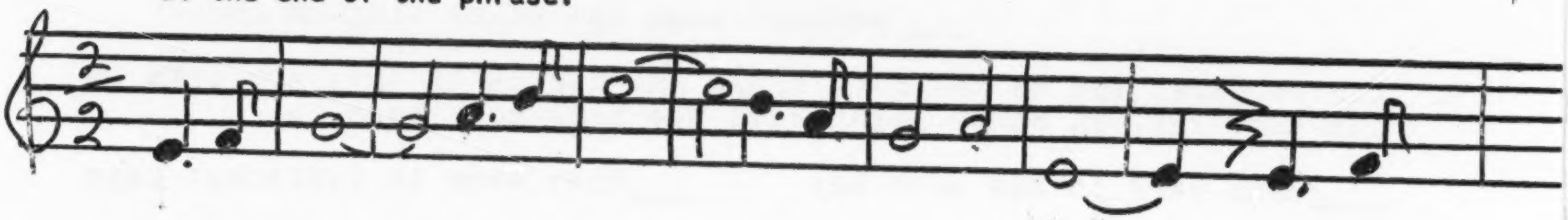
d. Second melody same as first____ Second melody different____

AURAL TEST #3

1. Write in these notes. Ignore bar lines. An eighth note G. A quarter note E. A half note B. A dotted eighth note F. A sixteenth note G.



2. In the melody below, show where the phrases end by drawing a long line like this | at the end of the phrase.



3. You will hear a measure with four chords. It will be followed by three tones. Choose the tone that sounds like the key tone or "do".

a) ☐ ☐ ☐

b) ☐ ☐ ☐

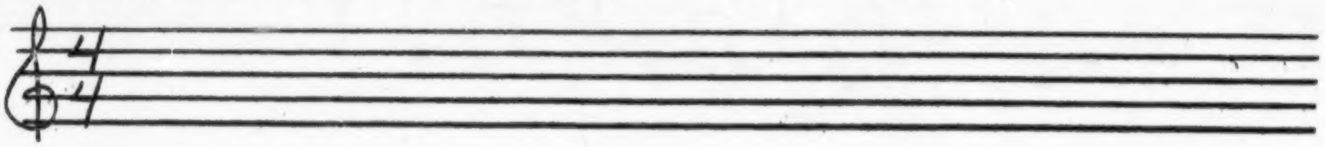
c) ☐ ☐ ☐

AURAL FINAL

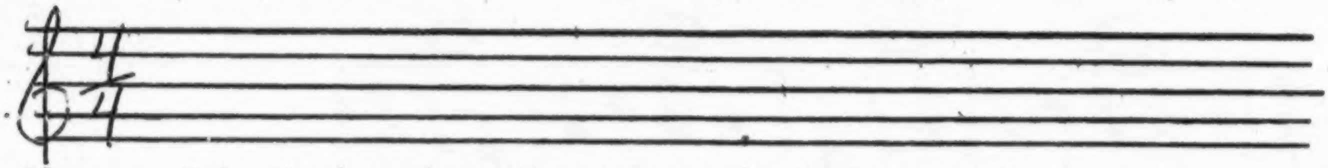
Name_______________________

School_______________________

1. Write in these notes (quarter notes) A C F B E D C G

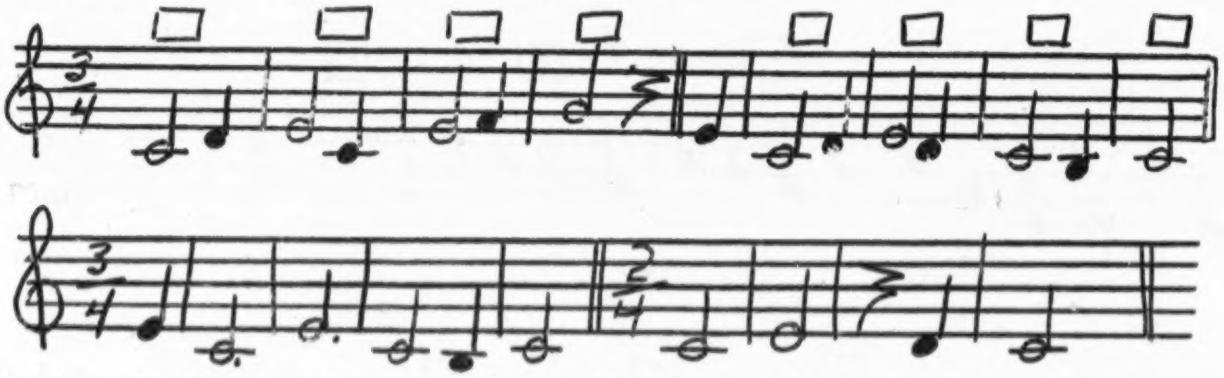


2. Write the following chords in C major (quarter notes) I IV I^6_4 V^7



3. Place an X in the box above the measure played incorrectly in rhythm or melody.

If there are no mistakes, leave all boxes blank.



4. Listen to these cadences and identify by name or chord structure.

a.__________ b.__________ c.__________ d.__________ e.__________

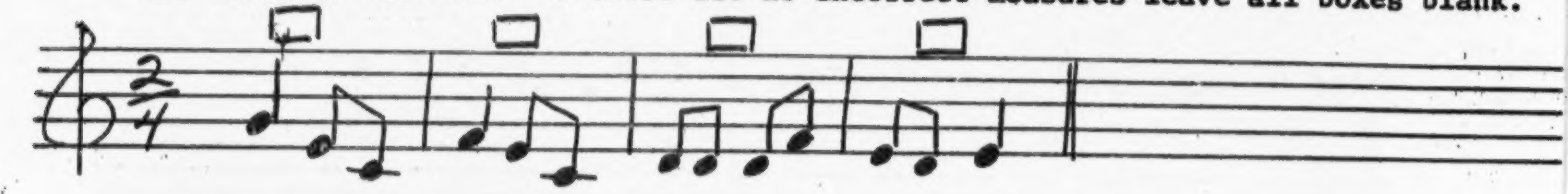
5. Write a V^7 chord in C major.

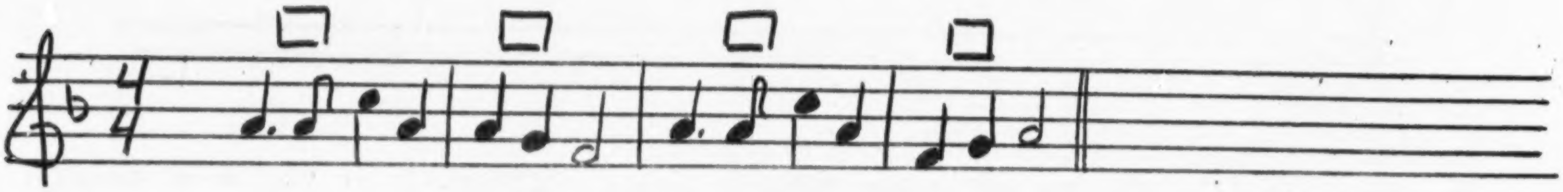
6. Identify the meter, either $\frac{2}{4}$ or $\frac{3}{4}$, in the following songs.

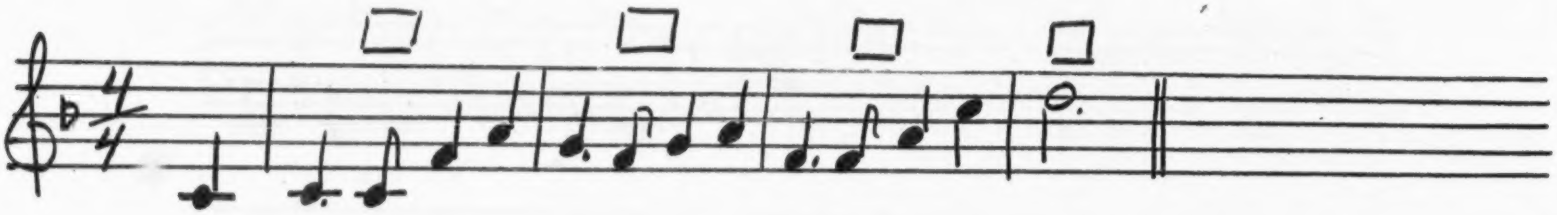
a.__________ b.__________ c.__________ d.__________

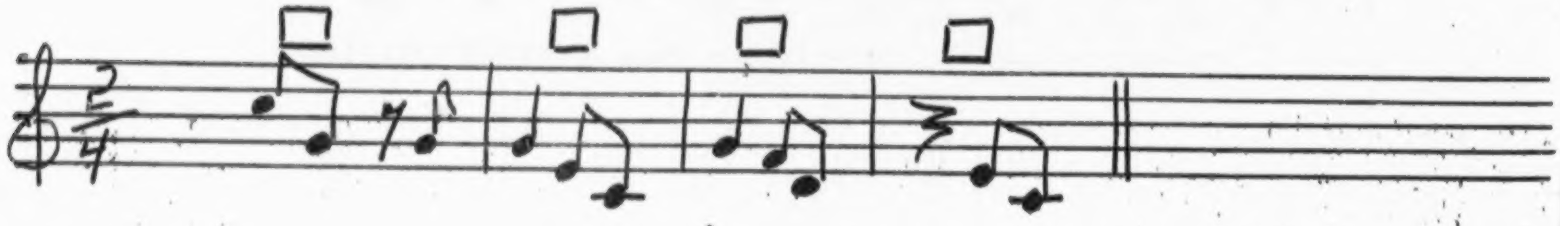
AURAL TEST #3-Page 2

Place an X in the box above the measure or measures played differently than the music is written. If there are no incorrect measures leave all boxes blank.









IV-19

Aural Final

page two

7. Answer SAME (S) or DIFFERENT (D) to the following rhythmic patterns:

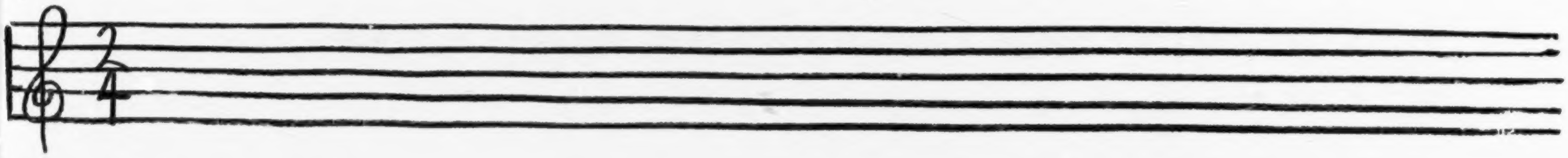
a._______ b._______ c. _______ d. _______ e. _______

8. Answer SAME (S) or DIFFERENT (D) to the following melodic patterns:

a. _______ b. _______ c. _______ d. _______

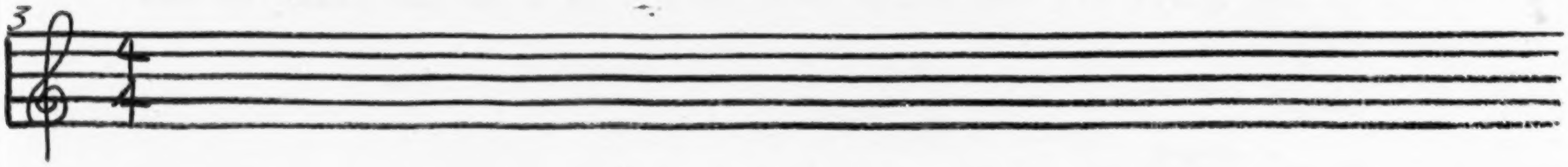
9. Write down the music now as your teacher plays it. Use the key of C. She will play C and set the tempo before she begins.

1.

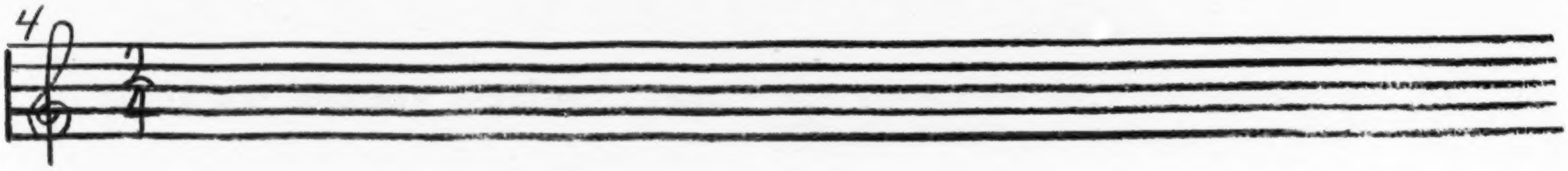


2

3



4



Keyboard Test 1

1. T F The higher notes are to the right as one sits at a piano keyboard.

2. T F The keyboard is arranged so there is a series of 4 black notes, 3 black notes, 4 black notes, and so on.

3. T F In numbering fingers, the little finger of the right hand is number 5.

4. T F In numbering fingers, the little finger of the right hand is number 1.

5. T F To play music that sounds scalewise, one may play every white key going up or down.

6. T F If one plays more than one note, for example plays C-E-G separately on the piano, he is playing a chord.

7. T F Harmony means singing very high without a piano.

8. A on the piano is located:

____on a black key

____on a white key between the set of two black keys

____on a white key between the set of three black keys

9. Answer more than once if there is more than one correct answer. If one plays all the white keys from C to C on the piano he has played:

____a scale

____a chord

____scalewise music.

10. 5 chords will be played on the piano. Indicate whether you think they are major or minor chords.

1. ________
2. ________
3. ________
4. ________
5. ________

Keyboard Test 2

1. T F A chord can only be played with the left hand.

2. T F A chord is often 2 or more notes played with the left hand and can provide harmony to a melody.

3. What does a sharp do to a note? ______________________________

4. C, G, and F chords are all

____white note chords

____black note chords

____some white and some black note chords

5. In $\frac{3}{4}$ time chords or strong beats are usually on the

____1st beat

____2nd beat

____3rd beat

6. Circle the two most common chords in music.

I II III IV V VI VII

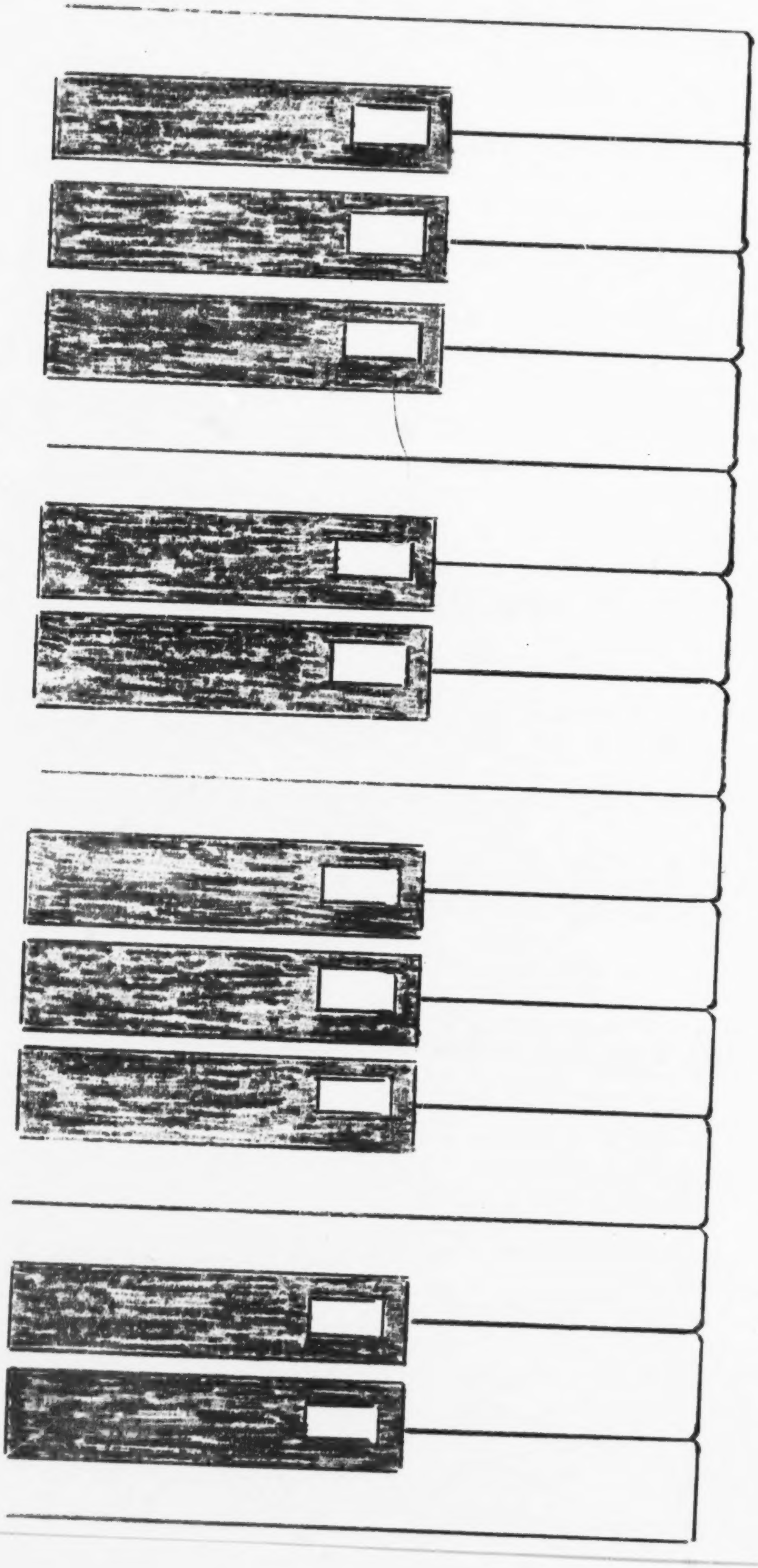
7. T F The I chord is more active than the V^7 and demands another chord to be played to resolve the cadence.

8. On the keyboard on the next page, write in the names of the notes.

9. Put the numbers of the fingers you would use to play an F chord on the correct keys on the next page. Do this for as many F chords as you can play with the left hand.

10. Put an X on the correct keys to play a C chord with the right hand.

11. Write in the space below the finger numbers for the song Lightly Row to be played with the right hand.



IV-23

Keyboard Test 3

1. What song is this? $5_{33}{}^{4}22_{1}2^{3^{4}}\ 555$ ____________________________________

2. Name the notes in a C chord ____________________________________

3. Name the notes in a G chord ____________________________________

4. Give the name of a white-black-white chord ____________________

5. Which is a half cadence?

   I IV__________

   IV I__________

   I V__________

   V I__________

6. Your teacher will now play 5 notes.

   Did she play 5 white keys (5 finger pattern like a scale)?_______
   or
   Did she play 5 black keys (pentatonic scale)?____________________

7. Your teacher will now play 5 more notes

   Were these 5 white keys ________________
   or
   Were these 5 black keys ________________
   or
   Were these some whites and some blacks ____________________

8. You will now hear a short song with different harmonizations. Which one is better?

   1st one____

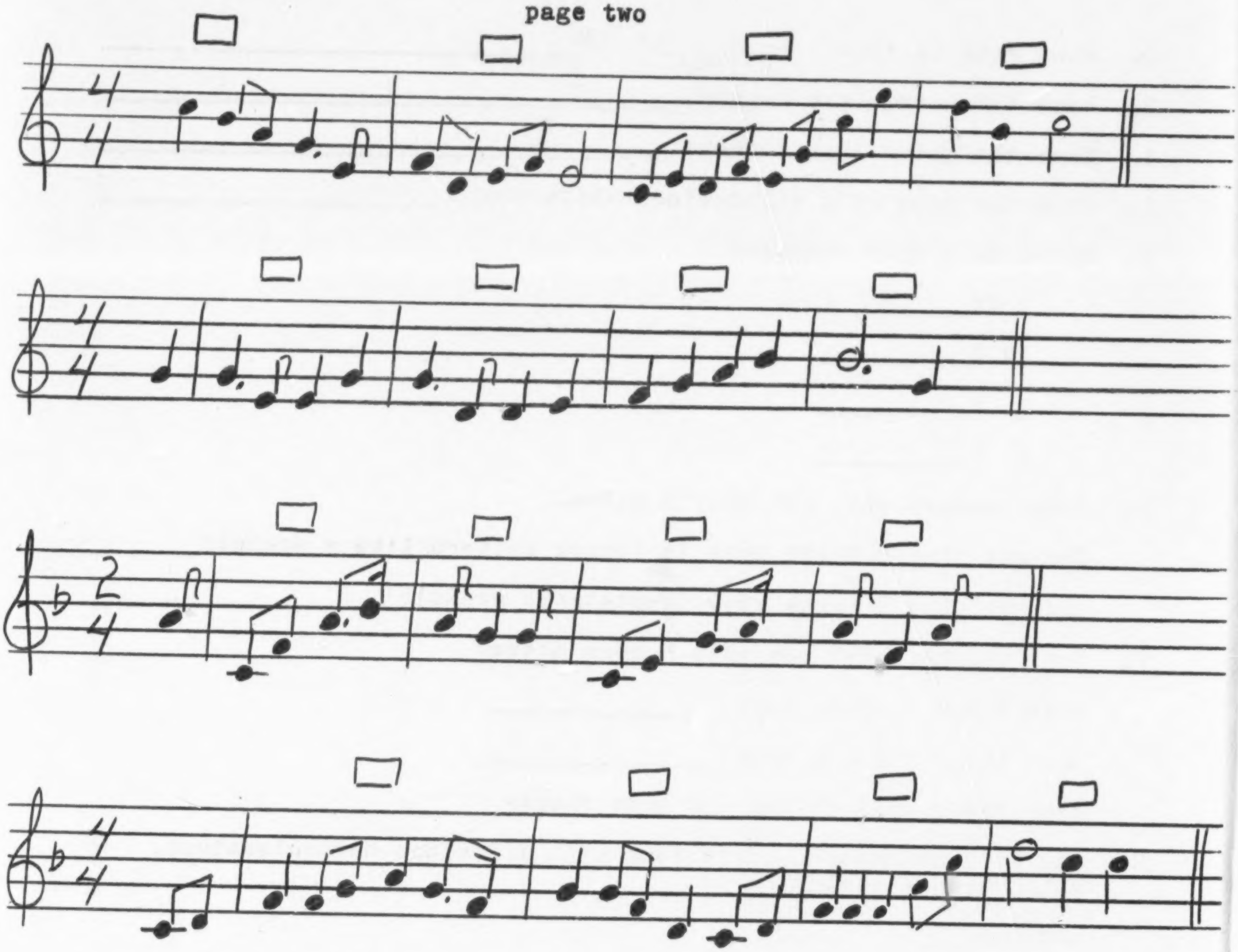
   2nd one____

   3rd one____

9. On the next page select the measure or measures played differently from the written music. Place an X in the box above the measure played incorrectly. There may be no incorrect answer, if so leave all the boxes blank.

Keyboard Test 3

page two



IV-25

Keyboard Final Examination

1. Choose which of the three finger patterns is correct for the music played on the piano. Place an X in the box above the correct answer.

☐ (Aunt Rhody) ☐ ☐

$^{33}2_{11}22^{4}3\,2_{1}$ $^{3}2_{11}222^{3}{}^{4}2_{1}$ $_{11}2^{33}22^{4}{}_{1}2^{3}$

2. ☐ ☐ ☐ (Old Mac Donald)

$111^{3}22_{111}{}^{33}2_{1}$ $^{3}2_{11}{}^{33}2_{11}22^{3}{}_{1}$ $333_{1}{}^{22}{}_{1}{}^{55}44_{3}{}_{1}$

3. Select the cadence or set of two chords played. Place an X in the box above the correct answer.

a) ☐ V^7-I ☐ IV-I ☐ I-V b) ☐ V^7-I ☐ IV-I ☐ I-V c) ☐ V^7-I ☐ IV-I ☐ I-V

4. Select the chord which has the least number of notes in it.

☐ First chord ☐ Second chord ☐ Third chord

5. You will hear a cadence followed by three notes. Select the note which is I, home tone or do for the cadence.

a) ☐ First note ☐ Second note ☐ Third note b) ☐ First note ☐ Second note ☐ Third note

6. Listen carefully to a short melody on the piano. You are to match this melody with one of three melodies played immediately afterwards. It will match in pitch and rhythm.

☐ First melody matches ☐ Second melody matches ☐ Third melody matches

7. Which harmonization of the melody do you feel is the better one?

☐ First harmonization ☐ Second harmonization ☐ Third harmonization

Keyboard Final Examination

page two

8. Select whether the notes you hear are scalewise, skipwise or all the same note.

a) ☐ scalewise ☐ skipwise ☐ same note b) ☐ scalewise ☐ skipwise ☐ same note

9. Three versions of a number will be played. Select the number which has the accents in the proper place.

☐ First version ☐ Second version ☐ Third version

10. Which chord is more active in sound?

☐ V^7 ☐ I ☐ IV

11. T F Higher notes are to the left as one plays the piano.

12. The note A on the piano is found:

☐ between the set of 2 black notes ☐ between bottom 2 of the set of 3 black notes ☐ between top 2 of the set of 3 black notes

13. T F Pieces with more sharps and flats (black keys) are harder to play than pieces in the key of C (all white keys).

14. Draw a line at the end of each phrase of Go Tell Aunt Rhodie-- THINK the melody. Example America: My country tis of thee | Sweet land of --------

GO TELL AUNT RHODIE GO TELL AUNT RHODIE GO TELL AUNT RHODIE HER OLD GRAY GOOSE IS DEAD GO TELL AUNT RHODIE GO TELL AUNT RHODIE GO TELL AUNT RHODIE HER OLD GRAY GOOSE IS DEAD

Keyboard Pre-test

I.

Listen to the following song which will be played on the piano twice by your teacher. Answer the following questions about the music you heard as best you can, by remembering as much as possible. Circle the correct answer.

1. The music swings in 1) two's 2) three's 3) four's 4) five's.
2. The melody (tune) consists of 1) one 2) two 3) three 4) four phrases.
3. The song uses two chords in it's harmony. They are: (1) I and V_7 (2) I and IV (3) I and II (4) I and VI.
4. Each cadence in the song was 1) plagal 2) authentic 3) deceptive 4) half.
5. The starting note in this song begins the (1) 1st (2) 2nd (3) 3rd (4) 5th degree of the scale.
6. The song consists of 1) 4 measures 2) 8 measures 3) 16 measures 4) 32 measures.
7. The last note of the song ends on the scale degree: (1) 1 (2) 3 (3) 5 (4) 7.
8. Most of the notes of this song are: 1) ♩'s 2) 𝅗𝅥's 3) 𝅗𝅥.'s 4) 𝅝's.
9. The song is in a 1) pentatonic pattern 2) minor key 3) major key 4) a combination of major and minor keys.
10. The range of the melody is: 1) small, within a 3-note pattern 2) small, within a 5 note pattern 3) large, within an octave 4) large, outside an octave.

II. CIRCLE THE CORRECT ANSWER

11. On keyboard sheet #1, the "X" marks indicate a scale. The "X's" form the scale of 1) G major 2) F major 3) D major 4) C major.
12. On keyboard sheet #1, the "O" marks form a major chord. The chord is 1) F# major 2) C major 3) A major 4) D♭ major.
13. On keyboard sheet #2, the "X" marks form a minor chord. The chord is 1) d minor 2) f minor 3) c minor 4) g minor.
14. On keyboard sheet #2, the "*" marks form a pattern known as 1) chord 2) non-harmonic tones 3) scale 4) pentatonic.
15. On keyboard sheet #2, the "O" marks form the V_7 chord in the key of 1) C 2) B♭ 3) F 4) A.

III. CIRCLE T IF THE STATEMENT IS TRUE, F IF THE STATEMENT IS FALSE

16. T F The higher notes are to the right as one sits at a keyboard.
17. T F In numbering fingers for piano playing, the little finger of the right hand is number 5.
18. T F A chord consists of two or more notes played together.
19. T F The keyboard is arranged so that there is a series of 3 black notes, 2 black notes, 3 black notes and so on.
20. T F Chord and harmony mean the same thing.

Keyboard Checklist

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I. (Check off items as you complete them)

Repertoire:	Write in Keys	Check RH-LH Melody		Harmony	Both melody & harmony	Write in key or keys transposed
1) Aunt Rhodie						
2) Hot Cross Buns						
3) Merrily We Roll Along						
4) Little River Flowing						
5) Lightly Row						
6) Old McDonald						
7) Cuckoo						
8) Sally Go Round						
9) O Susanna						
10) German Folk Song						
11) Erie Canal						
12) Ode to Joy						
13) Alouette						

II. Harmonizations:	Check when completed
1) Little Tom Tinker	
2) Frere Jacques	
3) Row, Row, Row Your Boat	
4) Skip to My Lou	
5) The More We Get Together	
6) Polly Wolly Doodle	
7) Down in the Valley	
8) O Where, O Where Has My Little Dog Gone	
9) London Bridge	
10) Drill Ye Tarriers	
11) For He's A Jolly Good Fellow	

III. Chords: (Write in key of the chords you can play)
(play and sing)

major I   minor I   I, V, I (keys)   I, IV, I

IV. Patterns (Write in keys you can play)

(play and sing)

major 5FP   minor 5FP   Scales   Pentatonic

V. Understandings (Check the items you feel you know and can define.)

Five finger pattern	
Phrase	
Cadence	
Non-harmonic	
Tone	
Chord	
(harmony)	
Major	
Minor	
Key	
(tonality)	
Scale	
Pentatonic	
(form)	
Repetition	
Contrast	
Transposition	
Skip	
Repeated tone	
Chord roots	
Meter	
♯, ♭	
Improvisation	

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Keyboard Skills

I can play

Aunt Rhodey	Right Hand	C_____	F_____
	Left Hand	C_____	D flat_____
Merrily We Roll Along	Right Hand	C_____	A_____
	Left Hand	C_____	E_____
Little River Flowing	Right Hand	C_____	D_____
	Left Hand	C_____	G_____
Little River Flowing	Both Hands together (Right--melody; Left--1 chord)		
Lightly Row	Right Hand	C_____	G flat_____
	Left Hand	C_____	A flat_____
Sally Go Round	Right Hand	C_____	A flat_____
	Left Hand	C_____	A_____

5-finger pattern ---- I ---- V_7 ---- I
(either hand)

C_____	E flat_____
F_____	G flat_____
D_____	B flat_____
	B_____

Scale G_____

IV-32

Keyboard Skills

Page two

I can play:

Scales (and sing the letter names as I play):

C _____(What is the key signature? Answer: (no sharps or flats)

F _____(What is the key signature? Answer: (one flat--B flat)

G _____(What is the key signature?_____________________)

B flat____(What is the key signature?_____________________)

E flat____(What is the key signature?_____________________)

D _____(What is the key signature?_____________________)

A _____(What is the key signature?_____________________)

Other scales I can play: (give the key signature)

_____ (   ) _____ (   )

_____ (   ) _____ (   )

Black Key (pentatonic) Pattern (G flat)

Old McDonald Right Hand_____ Transpose to F: Right_____
Left_____

O Susanna Right Hand_____
Left Hand_____ Transpose to F: Right_____
Left_____

2 note chords (G flat) I-V_7-I _____

Both hands (right-melody
left-harmony-
2 note chords) in G flat: Old McDonald_____
O Susanna _____

Both hands (right-melody
left-harmony-
3 note chords) in F: Old McDonald_____
O Susanna _____

I can build I - V_7 - I chords and sing letter names while playing:

Key of G_____ Key of B flat_____ Key of D_____

Key of F_____ Key of E flat_____ Key of A_____

Key of G_____ Others: